

PROPOSED RIVERHEAD STRUCTURE PLAN AND PLAN CHANGE, AUCKLAND: ARCHAEOLOGICAL ASSESSMENT

Prepared for Riverhead Landowner Group

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INTRODUCTION

Project Background

Riverhead Landowner Group¹ are seeking a Structure Plan and Plan Change for land currently zoned as Future Urban Residential at Riverhead, Northwest Auckland (Figure 1). The land is located to the west of the Riverhead-Coatesville Highway and the current Riverhead township, and to both the north and south of Riverhead Road (Figure 1). The land consists of some 18 properties and comprises 80 hectares. It is bounded by Duke Street, Te Roera Place and the Wautaiti Creek in the north and northwest; by Cambridge Road and the Riverhead-Coatesville Highway in the east; by Lathrope Road and rural residential properties in the south; and by rural residential properties that are situated off Riverhead Road in the west (Figure 2). The Future Urban Zone (FUZ) land is bisected approximately into equal halves by Riverhead Road and the land is currently for the most part in market gardening cultivation, with associated rural residential properties (Figure 2) while the proposed plan change will see mixed zones of medium and higher density residential housing, a mixed rural zones, stormwater management areas, a leisure reserve and new roads (Figure 4). The topography of the project area is mostly flat to gently undulating (Figure 3), while the project area is traversed by at least three waka portage routes which reflect the importance of the area to mana whenua, and which retain significant cultural value.

An archaeological assessment was commissioned by Riverhead Landowner Group as part of a wider suite of assessments in support of their application to Auckland Council for a Plan Change of the FUZ area. This report has been prepared as part of the required assessment of effects accompanying a Plan Change application under the Resource Management Act 1991 (RMA) and to identify any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). Recommendations are made in accordance with statutory requirements.

Methodology

The New Zealand Archaeological Association's (NZAA) site record database (ArchSite), Auckland Council's Cultural Heritage Inventory (CHI), Auckland Unitary Plan Operative in Part (AUP OP) schedules and the Heritage New Zealand Pouhere Taonga (Heritage NZ) New Zealand Heritage List/Rārangi Kōrero were searched to determine whether any archaeological or other historic heritage sites had been recorded on or in the immediate vicinity of the project area. Literature and archaeological reports relevant to the area were consulted (see Bibliography). Early survey plans and aerial photographs were checked for information relating to past use of the project area.

A visual inspection of the project area was conducted on 3 March 2022, and a further visual inspection was completed on 23 August 2022 on a property previously unavailable for survey. The ground surface was examined for evidence of former occupation (in the form of shell midden, depressions, terracing or other unusual formations within the landscape, or indications of 19th century European settlement remains). Exposed and disturbed soils were examined where encountered for evidence of earlier modification, and an

¹ The Riverhead Landowner Group includes Fletcher Residential Limited, Matvin Group, and The Neil Group

understanding of the local stratigraphy. Subsurface testing with a probe was carried out to determine whether buried archaeological deposits could be identified or establish the nature of possible archaeological features. Photographs were taken to record the topography and features of interest.



Figure 1. General location map showing the location of the Riverhead township in relation to the Upper Waitemata Harbour and with the development area outlined in black

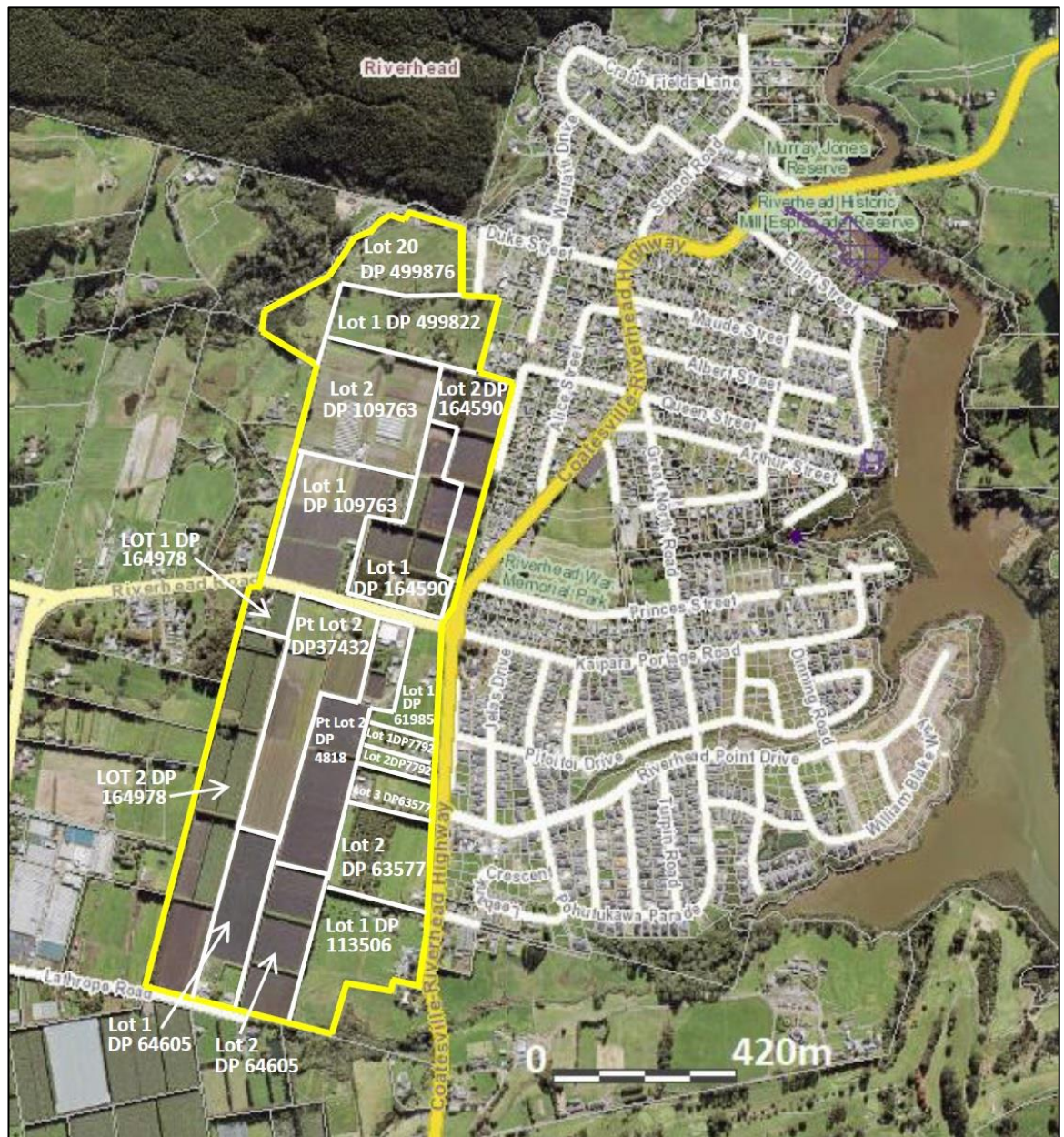


Figure 2. Aerial image showing the properties (labelled in white) that comprise the Riverhead Future Urban Zone area (outlined) in yellow.



Figure 3. Topographical map of the FUZ proposed Plan Change area. Source: Survey Group and Fletcher Living.

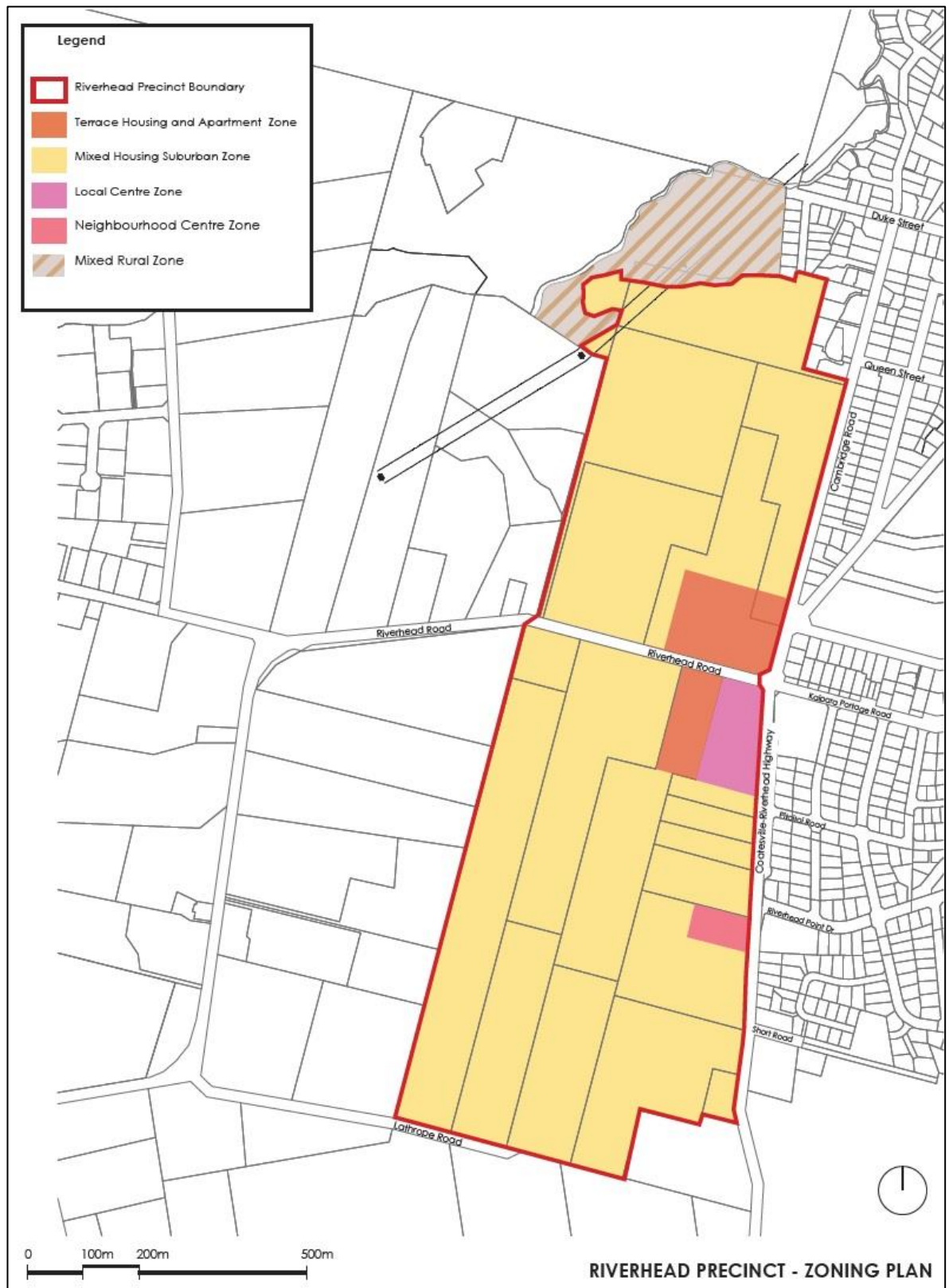


Figure 4 Zoning plan of proposed Riverhead Plan Change Area. Nb. The northern most property is now zoned as Mixed Rural due to the propensity of the area to flood. Source: Barkers.

HISTORICAL BACKGROUND²

Māori Settlement³

The area was occupied at various times by a number of different tribes: Ngāti Whātua o Kaipara, Ngāti Awa, Ngāoho, and Te Kawerau ā Maki (Kawharu n.d.), among others. The names and rohe of tribal groups were subject to great fluidity throughout pre-European times.

Te Kawerau ā Maki descend from the Tainui, Te Wakatuwhenua and Te Moekakara canoes. Their ancestor Maki migrated from the Tainui and Taranaki regions and took control of much of the land between Tāmaki and the Kaipara. The tribe takes its name from Maki's son Te Kawerau ā Maki, who was named after a dispute between Maki and Ngāti Whātua over kūmara plantations (Taonui 2008).

Ngāti Whātua descend from the Ngāti Whātua confederation of tribes which also includes Te Roroa, Te Uri-o-Hau and Te Taou. The confederation originates from the ancestor Tumutumuhenua and the Māhuhu-ki-te-rangi canoe. Their ancestors migrated from Muriwhenua to the Kaipara Harbour and other areas, where they intermarried with and subsumed earlier peoples. Ngāti Whātua o Ōrākei occupied the central isthmus during the mid-18th century (Taonui 2008; Kawharu n.d.). Ngāti Whātua defeated and forged alliances with Ngāti Awa, who had settled to the west of the Kaipara River sometime around 1450 AD, and with Ngāoho. Around 1600 AD Ngāti Awa had fallen out with Ngāoho, and the ensuing war involved Ngāti Whātua, who eventually emerged victorious (Kawharu n.d.).

Ngāti Whātua then sought alliance and intermarriage with Te Kawerau (Kawharu n.d), but a number of skirmishes between the two groups led to war. Ngāti Whātua captured pa all the way down the Kaipara to Helensville and across to Muriwai. This defeat left Te Kawerau inhabiting just the Waitakere Ranges, with a peace agreement reached at Taupaki (Kawharu n.d.). The hills were traditionally known as 'Nga Rau Pou Ta Maki' or 'the many posts of Maki' (Annandale 1999: 8).

During the 1820s the musket-armed Ngāpuhi attacked various tribal groups throughout Northland and down into Auckland. Ngāti Whātua were attacked and defeated, with the survivors retreating south, leaving much of the area around the Kaipara largely uninhabited. It was not until the mid-1830s that these areas were repopulated (Kawharu n.d.). During the period of warfare Ngāti Whātua are said to have established small settlements at a number of places, including nearby Kumeu (Dunsford 2002: 17).

Portage Route and Māori Occupation in Northwest Auckland

The portage route from Pitoitoi Riverhead to the Kaipara was a traditional portage used for many centuries. It was traversed by the crew of Te Arawa canoe and a smaller crew associated with Te Arawa, the Pukateawainui (Clough and Baquié 2000: 2). It remained a

² The historical background incorporates work from a number of other Clough reports as well as new research. The reports are listed in the bibliography.

³ While based on reliable documentary sources, this information should not be viewed as complete or without other context. There are a large number of iwi historically associated with the Auckland region and many other histories known to tangata whenua.

major canoe and walking portage and was of importance during the European settlement of the Kaipara until the construction of the first rail link in 1875 (ibid.). The Kumeu–Kaipara River forms a natural pathway between the Kaipara and Waitematā Harbours. Canoes were paddled up the Waitematā to the Riverhead inlet, dragged across land to the Kumeu River and then paddled down the Kumeu–Kaipara River to the Kaipara Harbour (Dunsford 2002: 16).

European Settlement

Organised pioneer groups never systematically settled Riverhead. Kauri timber was being exploited in the area as early as 1841 but no specific date can be ascribed to a first European community (Madden 1966:11). Originally known as Pitoitoi by Māori (after the North Island Robin – *Miro longipes*), during the early European settlement period Riverhead was described variously as being on the Rangitopuni or Waitaiti Streams, Pitoitoi, the Kaipara Landing Place or Portage (Madden 1966 pp 11 and 21). The Crown acquired the vast Mahurangi Block from Māori in April 1841, which included the Riverhead area north and east of the Kaipara Portage and the Paremoremo and Lucas Creek areas. Then from 1851 to 1867 the land to the west and north of the portage was acquired. The land was surveyed into sections and granted by the Crown to various individuals (Madden 1966:34). The Riverhead township area (Allotment 75) was granted to James Williamson in 1858, but by 1860 had been acquired by J.S. McFarlane. The Riverhead Township lots were put up for auction in February 1863 (Figure 5).

The portage route used by Māori from Riverhead to the Kaipara remained an important walking route for European travellers until the 1860s, when coaches serviced it. In 1866 Ngāti Whātua promised a stretch of land 3 chains wide from Riverhead to Helensville for the construction of a railway line, closely following the old canoe portage route. Work began in 1871 and was finally completed in 1875 (Dunsford 2002: 30-32; Murdoch 1988:13).

It would appear that for the most part the wider Riverhead area followed a classic pattern of rural land use similar to that found in the greater West Auckland area. This involved the primary clearance of kauri forest by logging companies, followed by gum diggers working the ground to excavate the kauri gum deposits. Riverhead contributed to the £20 million worth of gum exported from the Auckland gum fields from 1845 to 1925. The Riverhead region was readily accessible to Auckland and received early attention, which is why £10 million worth of gum was exported before 1900 (Madden 1966:111). Riverhead's interior gum lands can claim to be the first in the north Auckland Land District to be settled under the 1926 legislation (Madden 1966:13).

By March 1868 Mr Gardner and Mr Houlton of Sunnyside, Riverhead, were amongst the first growers of clover seed, to be followed in the 1920s by the developments of the Levy Bros. Tobacco growing in the former gum fields was also undertaken from the 1920s, brought about the early tobacco pioneer Gerhard Husheer (Madden 1966:175-77). In the 1920s the Harkins Point area was used by the Auckland City Council as a horse farm.



Figure 5. 1863 advertisement in the *Daily Southern Cross*: 'Riverhead. The Property of J.S. McFarlane Esquire. For Sale ...' (Auckland Libraries Heritage Collections, NZ Map 4498.7). Showing site of Lamb & Melvin's Flour Mills (arrowed)

Riverhead Mill

Brigham's Waitemata Flour Mill

In January 1855 John Brigham acquired 94 acres of land on the Riverhead foreshore from fellow Auckland Harbour Board Commissioner William Farley Blake for £230, and an adjoining 88 acres from the Crown in August 1855 for £40. Blake had been a landowner in the Riverhead district from the 1840s and is reputed to have built and run a timber mill in Riverhead (Madden 1966). To achieve the purchase Brigham had borrowed £450 from John Logan Campbell and in March 1856 he also received an advance of £300 at an interest rate of 20% from Auckland settler Benjamin Evans Turner (Madden 1966:79).

Back on the site of the new flour mill, Brigham employed Charles Trick, a Cornish miller, and his nephew Charles Trick Hosking, who both spent over a year erecting the flour mill. By April 1856 Brigham had built and established the Waitemata Flour Mill, grinding local wheat. Legal evidence indicates that Brigham may even have commenced to erect his mill as early as 7 August 1855 (Madden 1966:79). In July 1857 Brigham obtained an additional £1000 at 14% from William Dover and Robert Bent, which allowed him to repay his earlier loans in full (Madden 1966:80).

With the departure of Charles Trick and his nephew in 1859, Brigham was joined by two other millers, Alexander Adam Melvin and John Lamb (Madden 1966:80). By this time Brigham's resources were stretched to their limit. While the mill had been completed, Brigham found himself financially over-committed and his creditors were pressing for payment. As a result William Dover transferred his interest in the company to Samuel Browning, the Director of the Bank of New Zealand and of the Loan and Mercantile Agency. Then in October Andrew Rooney and John Sangster Macfarlane took possession of the mill, successfully bidding £430 at an enforced auction. Before long Browning's interest was also acquired by Rooney and Macfarlane and an agreement dated 20 October 1859 was implemented. By this, as joint trustees, they were directed to let the property for five years or sell the property in order to satisfy outstanding creditors (Madden 1966:85).

Lamb's Flour Mill

John Lamb and Alexander Melvin, still employed at the mill, now acquired an interest in the flour mill company (though not in the ownership of the mill) and continued to work there. In 1861, Macfarlane's place as co-owner was taken by James Williamson of Remuera (Madden 1966: 85). In 1863 Melvin died of consumption. This left Lamb as the sole owner of the company despite a large debt, while the freehold of the mill site remained in the hands of others. Figure 5 shows the location of the mill in relation to the planned new town of Riverhead at this time.

By 1 February 1860 Lamb and Melvin were supplying considerable quantities of flour, sharps, bran and maize at their Queen Street premises. Lucrative contracts to European-run mills to supply biscuits to the growing military population as a result of the New Zealand Wars of the 1860s and the closure of many Māori-owned flour mills helped reduce Lamb's debt and enabled the expansion of the mill (Waterson 1959). Both Lamb's Mill and Partington's Mill in Auckland City were working around the clock during this period to meet demand.

Despite the presence of 10 other mills in the Auckland district Lamb was competing favourably, exporting products and doing well from his Queen Street shop in central

Auckland. From 1868 Lamb was exporting a large quantity of biscuits to the Pacific Islands, by means of Messrs Henderson and Macfarlane's cutters (Madden 1966:85).

During the 1860s and 1870s Lamb constructed a village around the mill. By this time Lamb was employing 30 staff and supporting a growing local community in Riverhead. Besides his own two-storied house the village comprised staff accommodation of a men's dormitory (two single-storey houses 24 x 12ft in size) and family cottages (four built in 1872 and six built in 1878), blacksmith's and tinsmith's shops, general store and Post Office, bakery and school (Madden 1966:89, 91).

There was strong competition within the Auckland region from other flour mills – namely, from Messrs Thornton, Smith and Firth and the Star Mill operated by Thomas Barraclough on Oakley Creek. There was also the steady influx of flour from the South Island and imported wheat and flour from Australia into Auckland. By 1877 the South Island mills exported 200 times more flour than Auckland mills and therefore were in the strategic position of being able to undersell all Auckland competitors (Madden 1966:85). Lamb encouraged and supported local farmers, aware that it was economically detrimental for Aucklanders to be dependent on imports, while also importing large quantities of grain from Canterbury (Madden 1966:85, 89). Lamb's Mill reached its zenith in 1879.

The advent of the roller mill process in the 1880s marked the end of many rural mills that could not afford the changeover. Lamb had anticipated a move to Auckland City as freight costs were a significant expense at the Riverhead location and were affecting his profit margins. In 1875 he purchased a Fort Street property for £1,027. Situated on Auckland's old shore line, the site proved a difficult and expensive one. Extensive excavations and retaining walls were necessary and in 1883 150m of the 50ft retaining wall collapsed. However, Lamb rebuilt and began milling at the Fort Street site in 1888 using the latest roller methods (Madden 1966:97).

Lamb had gone into considerable debt in the process, borrowing heavily from many persons and institutions, including the Bank of New Zealand, which intervened to relieve him of all liability in 1888. A new company, the Auckland Roller Mills Co. Ltd, was incorporated in November 1888, and John Lamb died less than a year later on 31 August 1889. However, the new company did not last long and went into liquidation in 1890. Following an amalgamation with the Waitemata Mills with Firths Roller Mill Co., a new company, the Northern Roller Milling Co. Ltd, was incorporated in January 1890. This company later became Champion Flour, and is still in operation today.

Riverhead Paper Mill

In October 1898, a group of prominent Auckland businessmen had mooted the idea of setting up a paper mill in Auckland. During the 1890s there was an increasing demand for paper and ever since the 1870s Auckland had been largely dependent upon southern paper mills (Madden 1966:137). After examining a number of sites they finally decided on Lamb's Waitemata Mill at Riverhead because it had many of the attributes of a good papermaking site, namely, a plentiful supply of freshwater, access to cheap harbour transport and proximity to the Auckland market. The Riverhead Paper Mill Company was incorporated as a public company in January 1899, with a capital of £15,000 from £1 shares, and George Morris sold the property to the Company for £600 in April 1899. The original directors of the company were Joseph Cochrane Macky, John Brown, Col. Henry Burton, Nathan Alfred Nathan, Wm. Scott Wilson, John Henry Upton and John Owen. The

Chairman was Joseph Macky, and the Secretary was George Elliot (Madden 1966:139; Angus 1976:67).

John William Greenhalgh from the Mataura Paper Mill in the South Island was enticed into becoming the manager of the Riverhead Mill. In March 1899 he was promptly sent to England to acquire the appropriate equipment. Meanwhile major reconstruction of the site was undertaken in preparation for the new machinery. The main mill buildings were built of concrete and corrugated iron, with engine mounts of concrete (Figure 6). The advent of the Riverhead paper venture had a profound effect in the employment field. Apart from attracting staff from the Mataura Mill in the South Island, it largely compensated for the departure of many gum diggers from the Riverhead region (Madden 1966:141). As a result the mill operations again fostered a flourishing local community as more workers' cottages and service industries were established.

The Riverhead operation became part of the New Zealand Paper Mills Company Ltd in March 1905. George Elliot, John Henry Upton and John Brown represented the Riverhead Company (Angus 1976:71).

With the advent of the First World War paper imports from abroad were halted and the Riverhead Mill prospered, making record profits, which continued up until the economic depression of the 1920s. Riverhead in its heyday was the only kraft paper mill in the country (almost 80% of the production at Riverhead was kraft). New Zealand's paper mills were major units in New Zealand industry, using modern sources of power and employing quite large numbers of workers (Angus 1976:99).

However, in September 1923 the company decided to close the Riverhead Mill and consolidate their operation solely in the South Island. The machinery from the Riverhead Mill was packed up and sent to the Mataura Mill to be used as late as 1964 to maintain the Mataura output (Angus 1976:103), and several of the paper mill's houses were sold off and moved (Madden 1966:149).

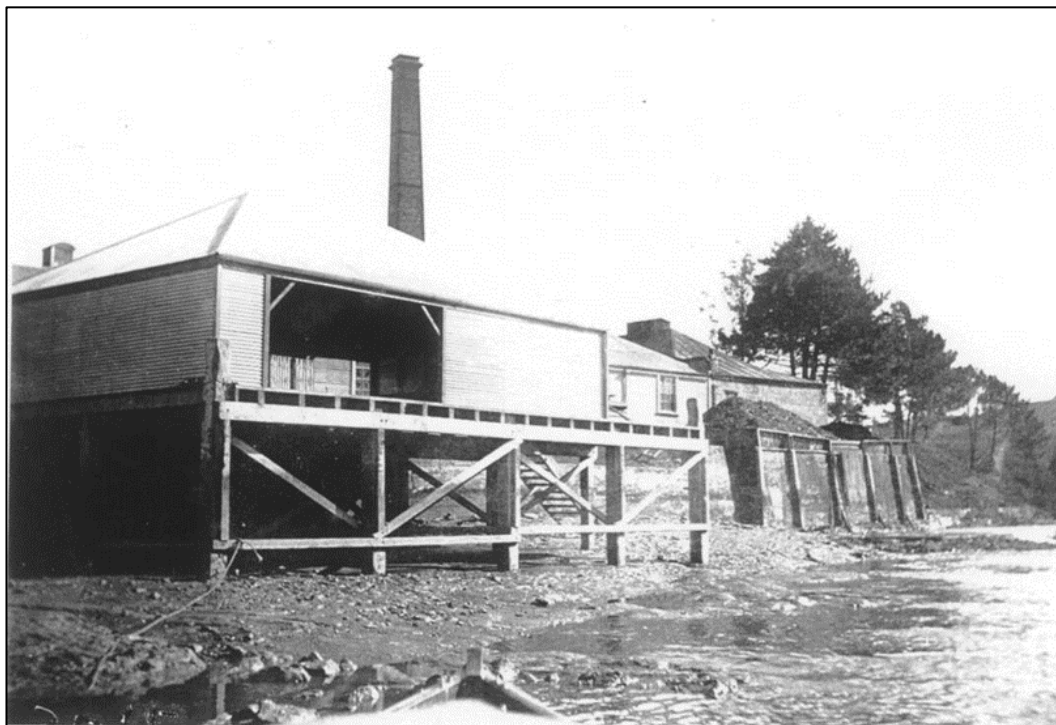


Figure 6. Riverhead Paper Mill 1900-1910. Charles Bailey photo (Auckland Libraries Heritage Collections, 37-3065)

Riverhead Mill Race

While the mill was in the ownership of John Brigham, the water supply was provided by a lagoon that had been excavated in the vicinity of the mill site. However, after Brigham had found himself in financial difficulties and following the enforced auction of the mill and the running of the mill by a board of trustees, by 1863 John Lamb eventually emerged as the sole owner. From 1866 motive power for the Riverhead Mill was derived from water carried by a race from a 40 acre lake formed by a 400ft (122m) long embankment 35ft (10.7m) high situated at the base of Cobbler's Hill c.2 miles (3.22km) from the mill (Clough et al. 2011). The race itself was of variable construction, the majority being an open solid earth race that had been excavated, with the resulting channel confined by earthen banks constructed of the excavated material. One section at least was a timber aqueduct, where the race crossed the valley in the vicinity of the Coatesville-Riverhead Highway near Riverhead School (Figure 7). Investigations near its terminus at the mill site indicated that some parts of the race were lined with concrete, while others were not (Clough et al. 2011).

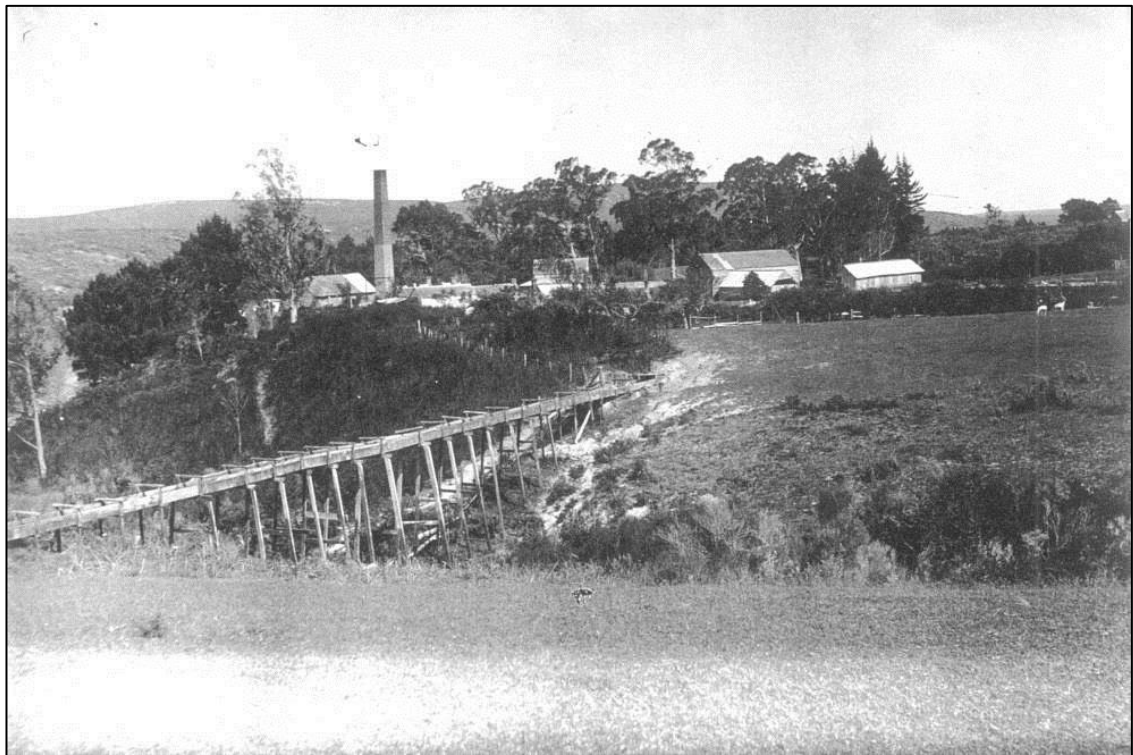


Figure 7. Riverhead Mill Race c.1900 (ACCL Bin247). This sections was comprised of a wooden aqueduct with the channel also being of timber construction

ARCHAEOLOGICAL BACKGROUND

Pre-European Settlement and Historic Period Māori Land Use in the Riverhead Area

Māori archaeological site distribution focuses on the coastline around the upper Waitematā Harbour, and the Riverhead area is no exception. Shell midden sites located along the coast are by far the most common site type as people set up temporary encampments and associated gardens while exploiting the rich marine resources of the harbour (Clough and Prince 1999:10). At Riverhead, these sites are also likely to relate to groups camping as they transited between the Waitematā and Kaipara Harbours via the Riverhead portage. The low-lying and poorly drained soils inland would not have been attractive for Māori settlement and use (Tatton 2001:58).

As stated in the historical background (above), the major canoe portage between Pitoitoi Riverhead and Kaipara was used for many centuries, and remained of major importance for groups transiting between the two harbours (both by waka and by foot) until the construction of the first rail link in 1875 (Clough and Baquié 2000: 2).

19th Century European Settlement and Land Use in the Riverhead Area

Initial European settler activities in the area were concerned with the exploitation and clearance of kauri forest by logging companies and their timber mills were situated in and around the immediate Riverhead area (Shakles et al., in prep.(a)). Following the extraction of timber, gum diggers would have moved into the area to excavate the rich gum deposits. By the 1850s industry in the area consisted of timber and flour mills, with two inns (Deacon's Inn and the Foresters Arms) servicing a growing population and travellers transiting through the portage. Deacon's Inn held a number of horse racing meets during the 1860s before finally closing around 1870, whereupon the Riverhead Hotel became the sole inn servicing the local area. The latter half of the 19th century witnessed increasing subdivision of early land grants and the establishment of burgeoning agriculture and later marketing gardening.

Previous Archaeological Work

There have been relatively few archaeological surveys within the wider Riverhead area. Those undertaken include a survey and assessment for a proposed gas pipeline (Bioresarches 1996; Clough and Prince 1998). Most of the previous archaeological work has focused on the site of the Riverhead Flour and Paper Mill (R10/721), an archaeological assessment of which was initially undertaken by Phillips (1994). An archaeological assessment of the effects of a proposed walkway at the Riverhead Mill Reserves was undertaken by Opus International Consultants Ltd (Plowman 2009), and a conservation plan was prepared for the Riverhead Mill for Auckland Regional Council by Clough & Associates (Clough et al. 2005).

In the early 2010s, Clough & Associates undertook three archaeological assessments of the effects of proposed residential subdivisions within the Riverhead South Outline Plan Area, none of which identified any archaeological features on those properties (Phear and Shakles 2014 and 2015; Shakles and Clough Apr. and Nov. 2011); while on land to the west of the township at Duke Street an assessment identified features associated with water management consistent with a mill site (Shakles et al. 2012). The site was subsequently excavated under archaeological Authority 2013/379 and determined to be a previously

unknown timber mill site probably relating to the mid-19th century occupation of the site by William Farley Blake (Shakles et al. 2013 and Shakles et al. in prep.(a)).

More recently, in late 2016, archaeological investigations of the large promontory extending into the upper harbour adjacent to and south of the portage entrance/exit, were undertaken during the residential subdivision of Deacon Point (Shakles et al., in prep.(b)). Archaeological excavations uncovered a number of both pre-European Contact Period and Historic Period Māori shell middens as well as evidence of season settlement on the promontory by Māori. Additionally, the remains of the mid-19th century period Deacon's Inn and a large European homestead were also found (Shakles et al., in prep.(b)).

Recorded Sites

The Future Urban Zone area is situated to the west of the Riverhead Township, and a search of the NZAA Site Record File Database revealed that there are no archaeological sites recorded within the FUZ, the sites in the area being mainly recorded close to the river (Figure 8 and Table 1). A search of the Auckland Council CHI also established that there are no other types of historic heritage sites recorded within the FUZ area (Figure 9 and Table 1).

Within 1km of the boundaries of the Future Urban Zone a total of 13 archaeological sites and three other sites of heritage significance are recorded on the NZAA ArchSite database and Auckland Council CHI respectively (Figure 8, Figure 9 and Table 1). The 13 archaeological sites include four historic structures: The Riverhead Mill (R10/721 = CHI no. 10); the Riverhead Wharf (R10/888 = CHI no. 644); the site of William Farley Blake's Riverhead timber milling operation on the Wautaiti Stream some 100m to the north of the northern boundary of the FUZ (R10/1376 = CHI no. 19994); and the site of Deacon's Inn one of New Zealand's earliest inns (R10/1377 = CHI no. 20360) (Figure 8, Figure 9 and Table 1).

Of the remaining nine sites, six are Māori shell midden sites (R10/1336 = CHI no. 21938; R10/1407 = CHI no. 20361; R10/1408 = CHI no. 20362; R10/1409 = CHI no. 20363; R10/1410 = CHI no. 20364; and R10/1411 = CHI no. 20365), while two others are historic European settlement period middens (R10/1342 = CHI no. 21939 and R10/1448 = CHI no. 17686) with both sites located on the western banks of the upper harbour (Figure 8, Figure 9 and Table 1). The single remaining archaeological site is recorded as a pit/terrace on the southwestern part of Deacon Point and consists of a postholes, pits, stakeholes and a possible earth oven (R10/1425 = CHI no. 20404) (Figure 8, Figure 9 and Table 1).

The three other historic heritage sites recorded solely on the Auckland Council CHI consist of two canoe portage sites (CHI nos. 141 and 15092), and the site of a historic structure which is the Riverhead Tavern (CHI no. 13233) (Figure 9 and Table 1).

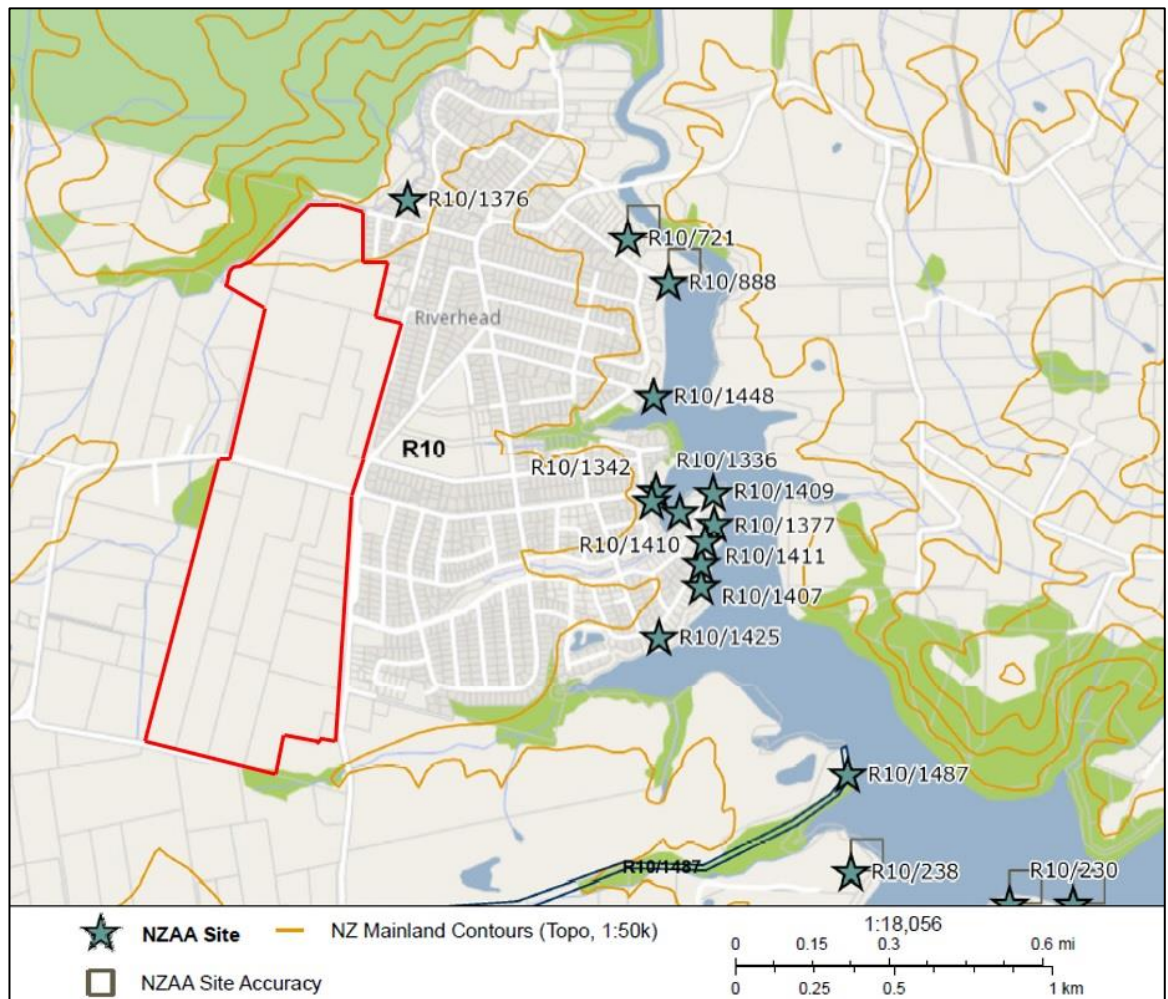


Figure 8. Archaeological site distribution map of the wider Riverhead area with the FUZ outlined in red. Source: NZAA ArchSite database

Table 1. Archaeological and other historic heritage sites recorded on the Auckland Council Cultural Heritage Inventory within a 1.2 km radius of the Plan Change area

CHI No.	NZAA No.	Site Type	Description
10	R10/721	Historic Structure	Waitemata Flour Mill/Brigham's Mill/Lambs Flour Mill/Riverhead Paper mill/Pitoitai Landing.
644	R10/888	Historic Structure	Riverhead Wharf.
17686	R10/1448	Historic Midden	European settlement period midden.
19994	R10/1376	Timber Mill	Site of William Farley Blake's timber mill on the Wautaiti Stream.
20360	R10/1377	Historic Structure	The site of Deacons Inn, reported to be one of the oldest Inns in NZ.
20361	R10/1407	Midden/Oven	Two deposits of fragmented and crushed cockle eroding out of the creek bank some 25m apart.
20362	R10/1408	Midden/Oven	Whole, fragmented and crushed shell midden deposit observed eroding out of coastal scarp.
20363	R10/1409	Midden/Oven	Large predominantly cockle shell midden deposit in a blackish brown ashy silty matrix containing frequent inclusions of charcoal and occasional heat fractured rock fragments. 27m east west by 18m north south.
20364	R10/1410	Midden/Oven	Shell midden eroding out of a small slope directly above the edge of the coastal scarp.
20365	R10/1411	Midden/Oven	A shell midden scatter eroding out of the coastal bank.
20404	R10/1425	Pit/Terrace	A number of postholes, one possible oven, small pits and stakeholes exposed in topsoil stripping on the Deacon Point property.
21938	R10/1336	Midden/Oven	Shell midden containing very small cockle (c.15mm in size).
21939	R10/1342	Historic Midden	European settlement period midden
13233	-	Historic Structure	Riverhead Tavern formerly Riverhead Hotel / Foresters Arms.
141	-	Canoe Portage	Riverhead Portage / Te Toanga Waka – Landing and canoe portage.
15092	-	Canoe Portage	Canoe portage - Te Toanga Waka.

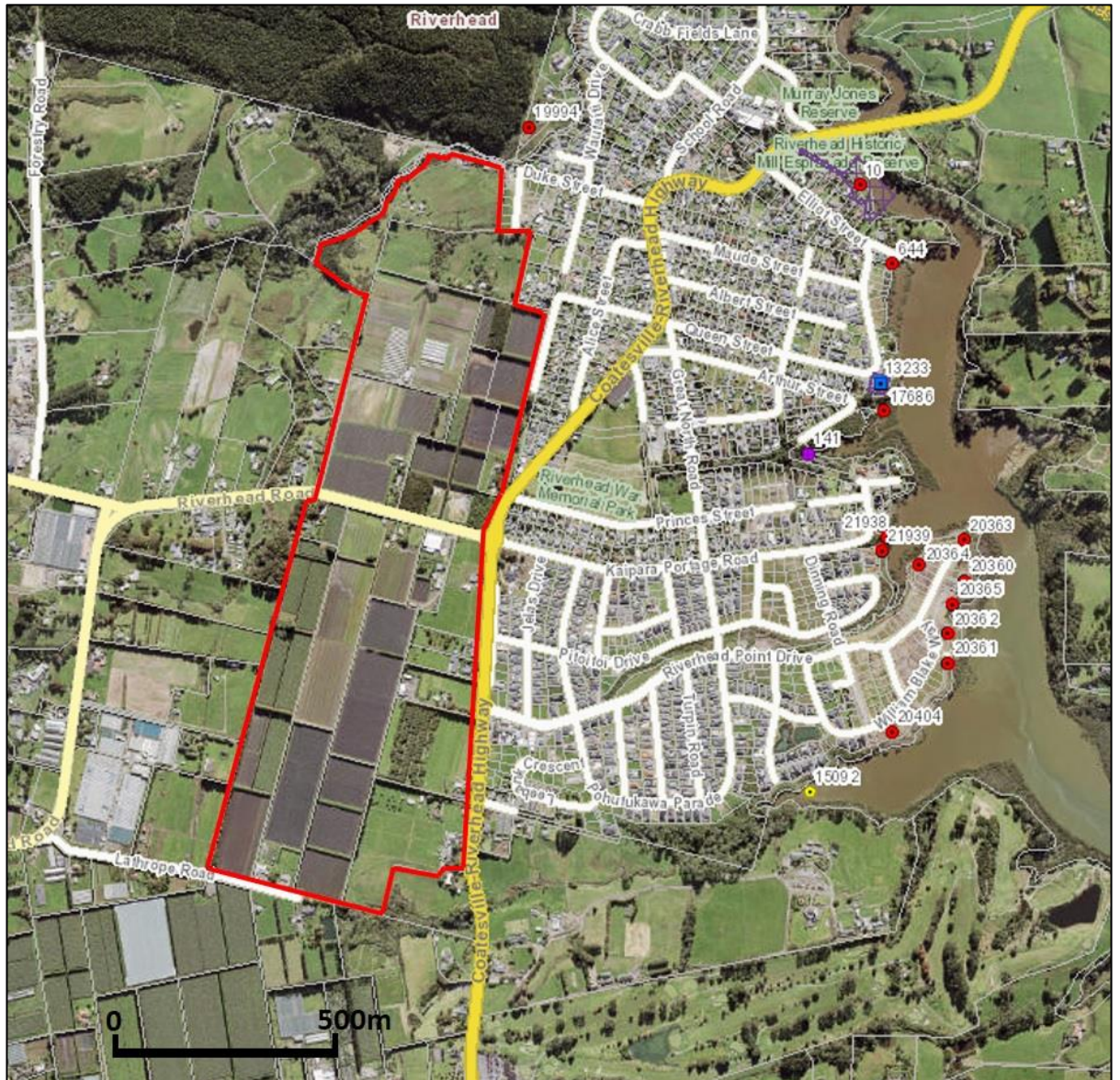


Figure 9. Archaeological and other historic heritage sites recorded on the Auckland Council CHI within a c.1.2km radius of the Plan Change area (outlined in red). Red circles = archaeological sites; blue squares = historic structures; purple circles = maritime sites, and yellow polygons = reported historic sites. Source: Auckland Council CHI website

HISTORICAL SURVEY

Information from Early Maps and Plans

A review of early maps and plans relating to Riverhead, produced three 19th century plans and one from the early 20th century that inform on former land use and ownership of land within the Riverhead FUZ area.

Firstly, detail from a plan (SO 958, ‘Plan of Road from Brigham’s Mill to Kelly’s Old Bush’) dated to 14 January 1862, illustrates that a track crossed the northern part of the FUZ area to the south of Riverhead Road (Figure 10). An overlay of the plan on an aerial image showing the Riverhead FUZ project area establishes that the track would have crossed land (in order from west to east) that today forms part of the properties of Lot 2 DP 164978; Pt Lot 2 DP 37432; Pt 2 Lot DP 4818, and Lot 1 DP 61985 (see Figure 2; Figure 10, and Figure 18). The plan also shows that John Brigham (the then Riverhead flour mill owner) owned the land that now forms the northern half of the FUZ area (Figure 10).

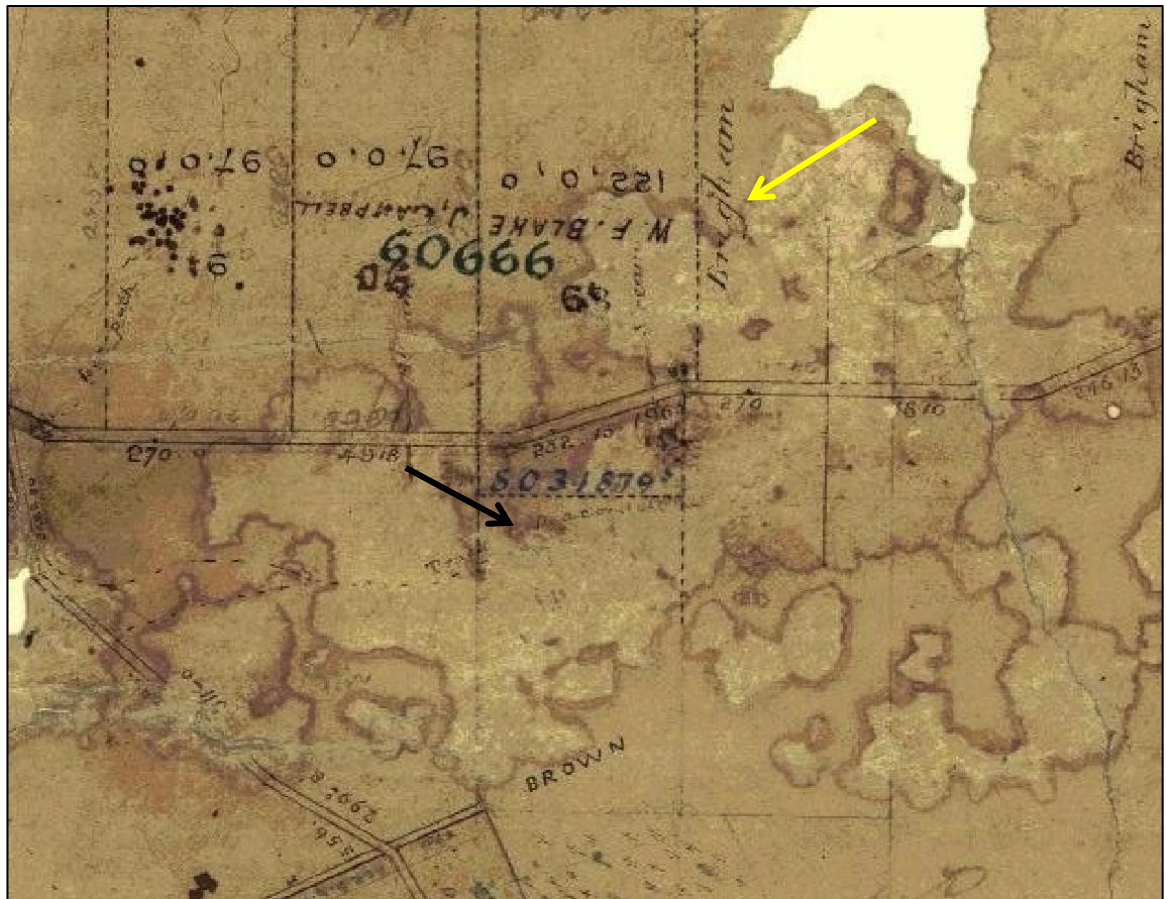


Figure 10. Detail from the 1862 plan SO 958 illustrating that the ‘Track to Deacon’s Inn’ crossed the northern part of the proposed FUZ area to the south of Riverhead Road (black arrow). The plan also indicates that John Brigham owned the northern part of what is now the FUZ area (yellow arrow)

An undated plan (SO 1579), although most likely dating to the early 1850s, shows that the northern half of the proposed FUZ area was owned by John Brigham, while the southern half of the FUZ project area was under the ownership of the multiple timber mill owner

William Farley Blake (Figure 11). The plan also shows that prior to the construction of what is now the Riverhead-Coatesville Highway, the road made a sharp turn across or in the near vicinity of the southeastern corner of the southern half of the FUZ area and connected with what is now Lathrope Road before joining Great North Road (Figure 11). The road appears to have crossed what is now Lot 1 DP 113506 and possibly part of Lot 2 DP 64605 (Figure 2 and Figure 11).

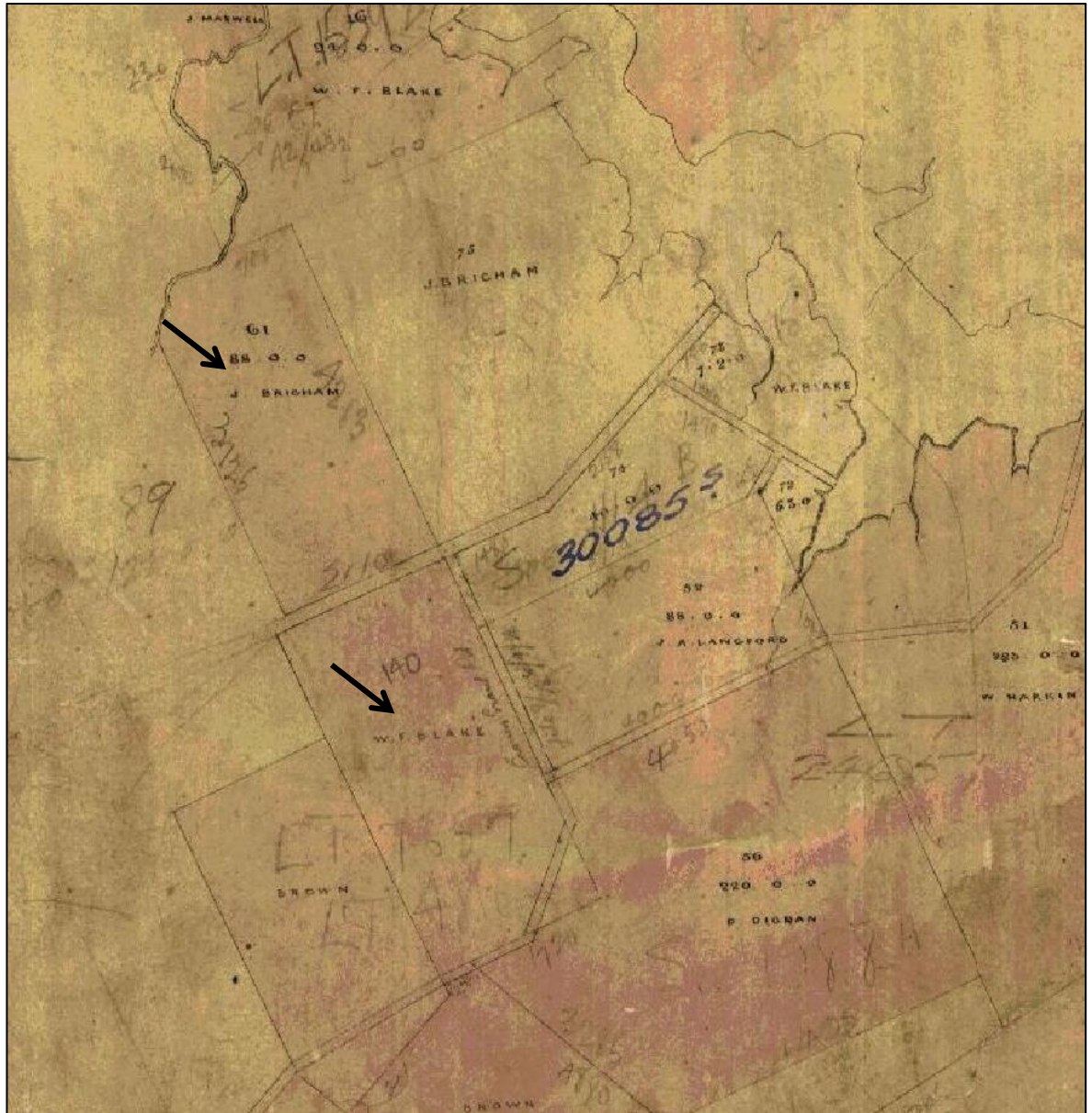


Figure 11. Plan SO 1579 likely dating to the early 1850s illustrates that the northern half and the southern half of what is now the Riverhead FUZ area were owned by John Brigham and William Farley Blake respectively (both arrowed).

A plan (SO 1114B) dated 27 June 1857 and titled ‘Waitemata Block IV Pitoitoi ’illustrates the location of Deacon’s Inn on a promontory that extends north-eastward into the Rangitopuni Creek and situated to the east of the Plan Change Area (Figure 12). The plan also shows the trackway that extended to the tip of the point as well as branching off

directly to the Inn itself (Figure 13), and is likely the end of the ‘trackway’ seen on the 1862 plan SO 958 (see Figure 10, above). The plan also depicts an ‘Old Native’s Landing Place’ that corresponds with the entrance/exit from the Waitemata – Kaipara portage route (Te Taonga Waka; CHI site no. 141) as well as a further ‘Landing Place’ at the head of the watercourse that enters the Rangitopuni Creek on the northern side of the Promontory (Figure 13). It is considered highly likely that the ‘trackway’ to Deacon’s Inn followed the well-established route of the waka portage across the northern half of the Plan Change Area to the south of the Riverhead Road (see Figure 18, below).

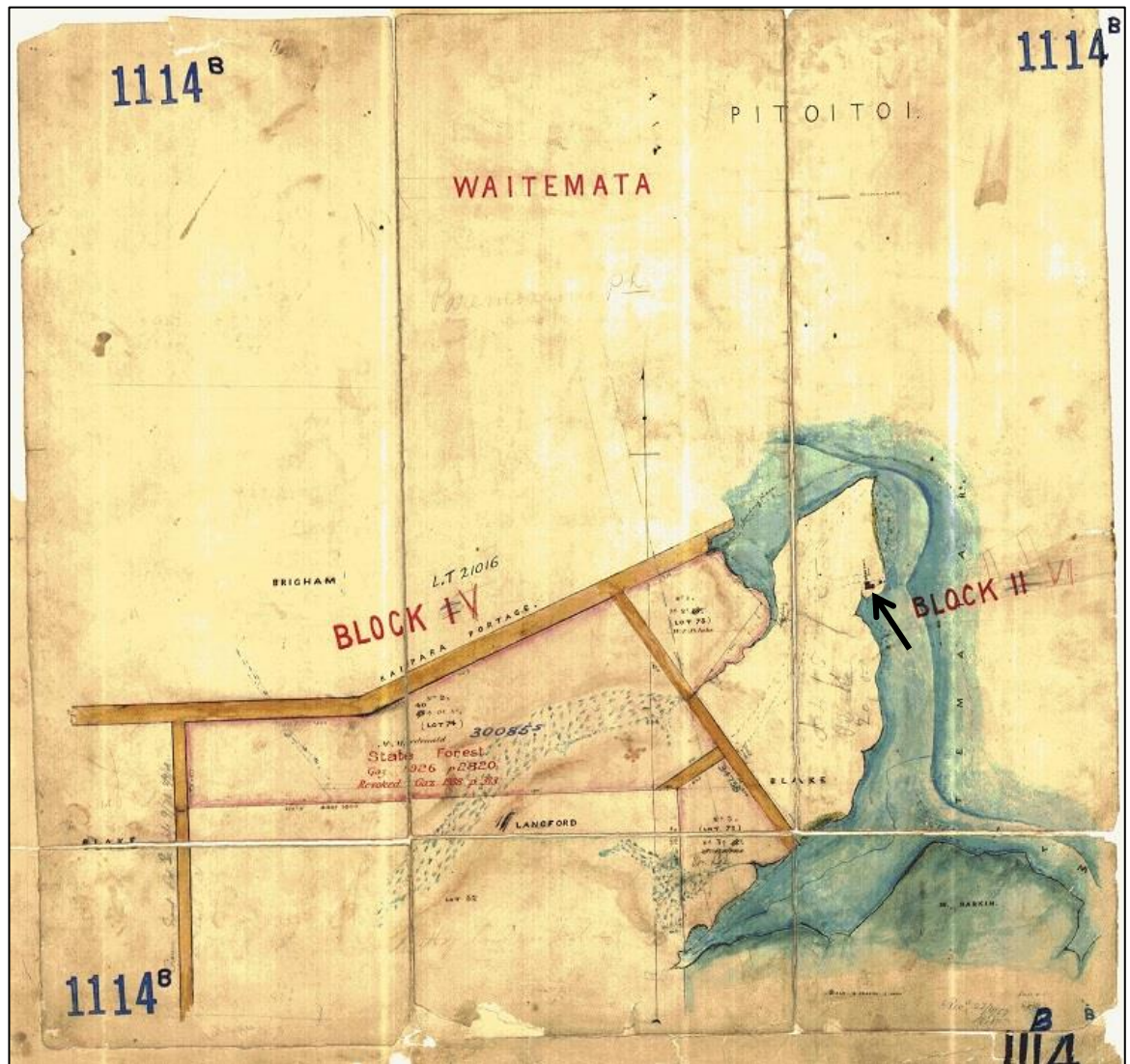


Figure 12 Plan SO 1114B dated 27 June 1857 and titled ‘Waitemata Block IV Pitoitoi’ shows the location of Deacon’s Inn (arrowed) close to the north eastern shore of the promontory extending in to the Rangitopuni Creek

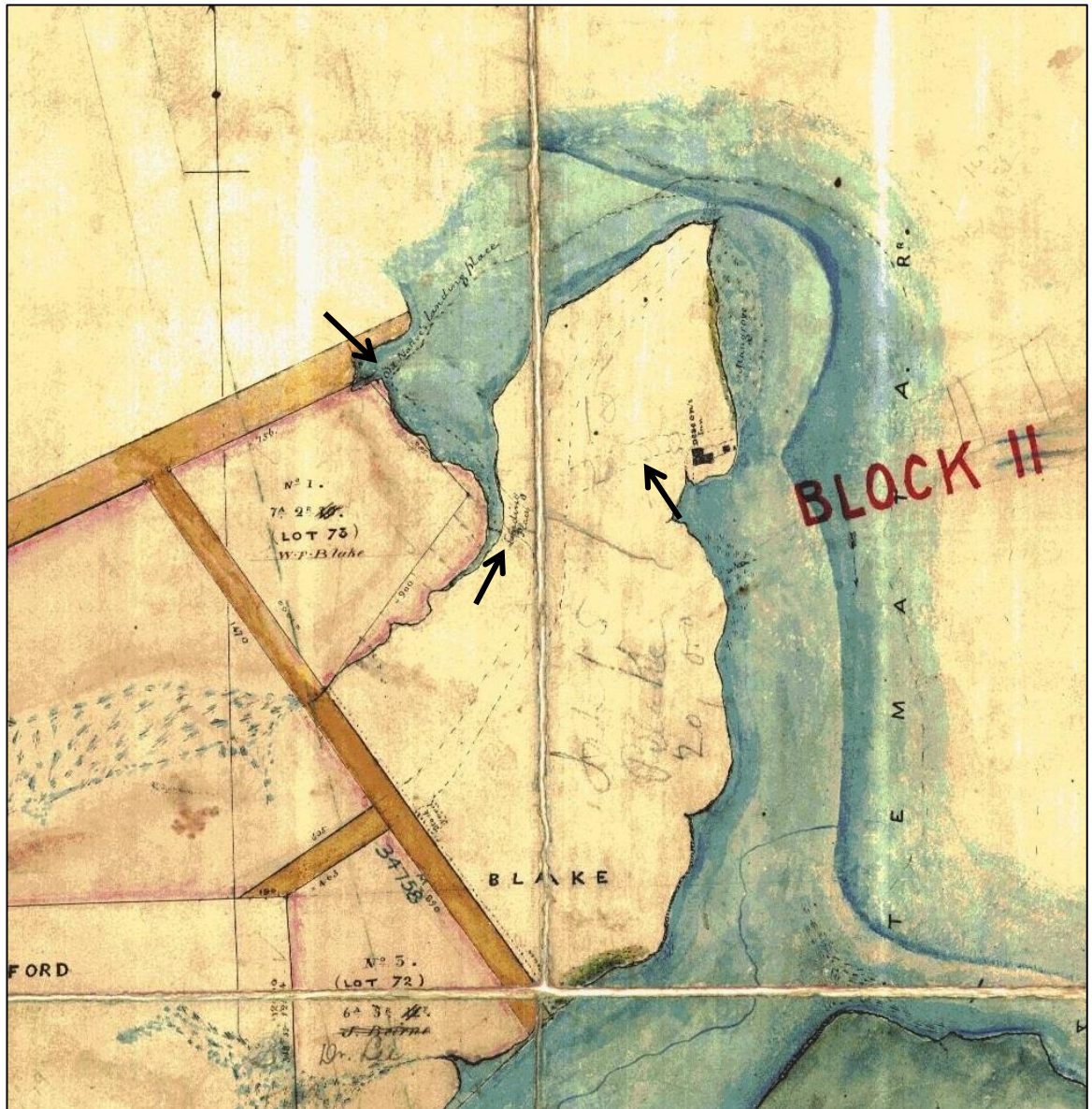


Figure 13 Detail from Plan SO 1114B dated 27 June 1857 showing the track to Deacon's Inn, the 'Landing Place' and 'Old Native's Landing Place' all arrowed

A plan titled 'Plan of Section 210 etc. Parish of Paremoremo' and dated 1891 shows a house owned by a 'E. Ellis' in the north of Allotment 140 on land that is now within Lot 1 DP 16497, and which forms the northwestern corner of the southern half of the FUZ area (Figure 14). An overlay of the plan on an aerial image of the project area suggests that the 19th century dwelling is within or partially within the footprint of the present house on the property (Figure 18).

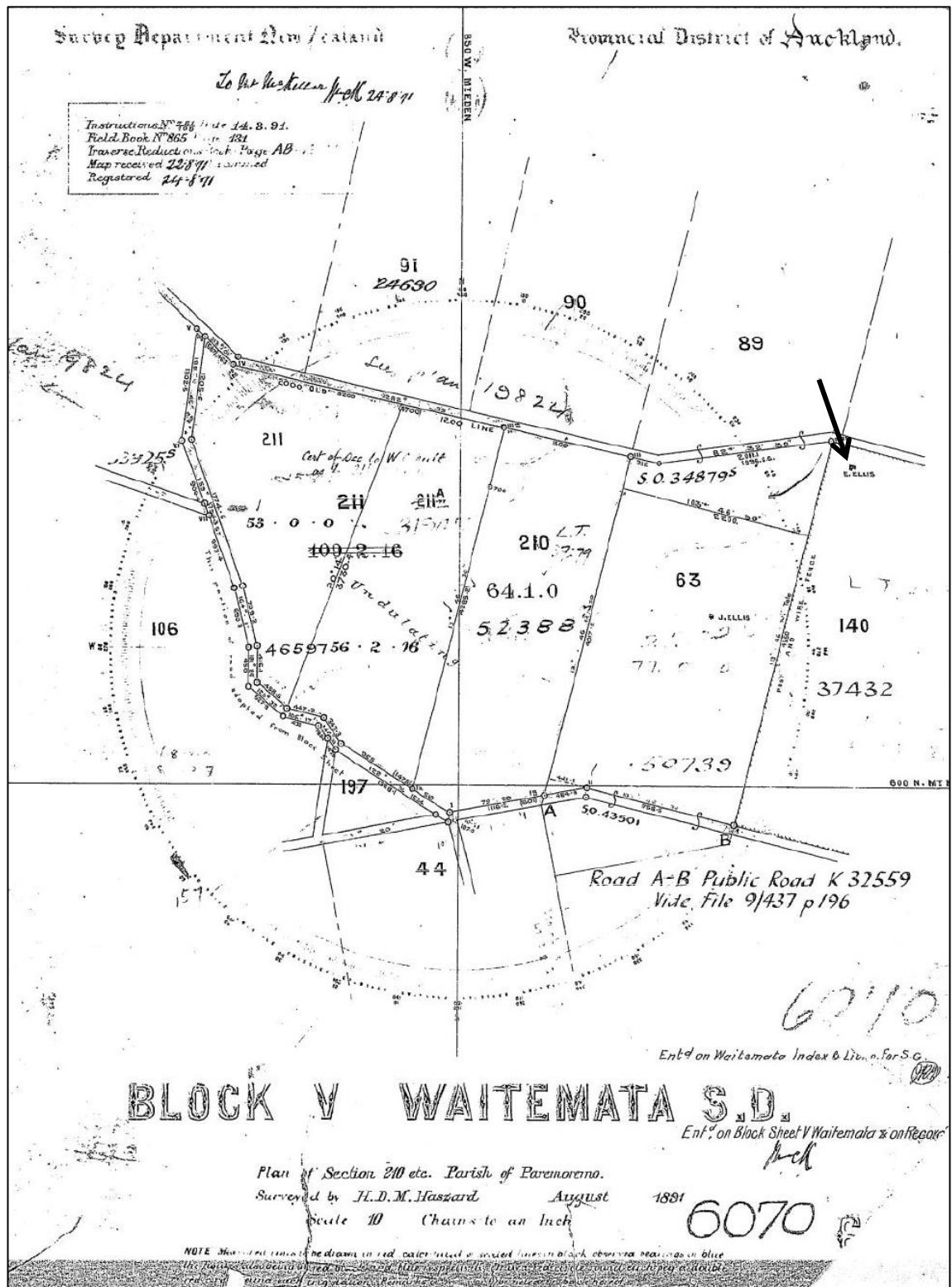


Figure 14. Plan titled ‘Plan of Section 210 etc. Parish of Paremoremo’ dated 1891 that shows a house (arrowed) owned/occupied by E. Ellis on what is now Lot 1 DP 16497, which forms the northwestern corner of the southern half of the FUZ area

Another plan (DP 4818) titled ‘Plan of Subdivision of Allot 140 and 140A Parish of Paremoremo’ and surveyed for Messrs. A and M Borich is dated 30 July 30 1909, and illustrates that Allotment 140 (including the E. Ellis property) was by then in the ownership of Ante Borich (Figure 15). The plan also shows that there were three buildings in the area,

one of which (in plan least) is consistent with a late 19th century square villa, with two other ancillary buildings depicted to the south (Figure 15 and Figure 14). It is probable that these would have been contemporary with the main house and were just not included on the 1891 plan (Figure 14, above). The plan also illustrates a ‘Paper Road’ in the southwestern corner of the project area, that would have been intended to link Lathrope Road with what is now the Coatesville – Riverhead Highway before connecting with Short Road, but which was not constructed (Figure 15).

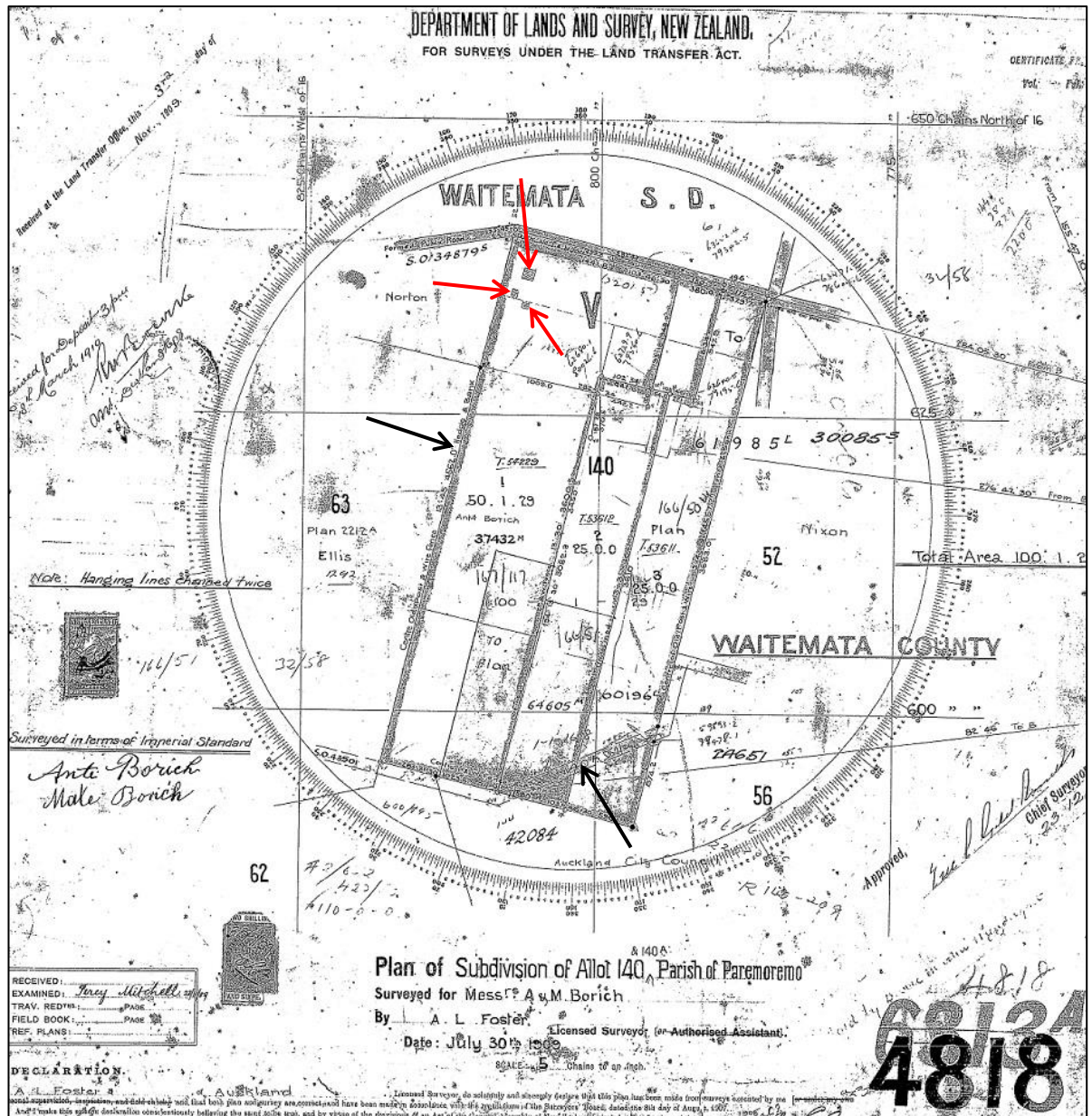


Figure 15. Plan (DP 4818) titled ‘Plan of Subdivision of Allot 140 and 140A Parish of Paremoremo’ dated 1909 shows that Allotment formerly owned by E. Ellis is now under the ownership of Ante Borich and shows 3 buildings including the dwelling on the property (arrowed in red). The plan also indicates that the western boundary consisted of a hedge and bank (arrowed), while a Paper Road is shown extending from Lathrope Road in the southwestern corner of the project area (arrowed)

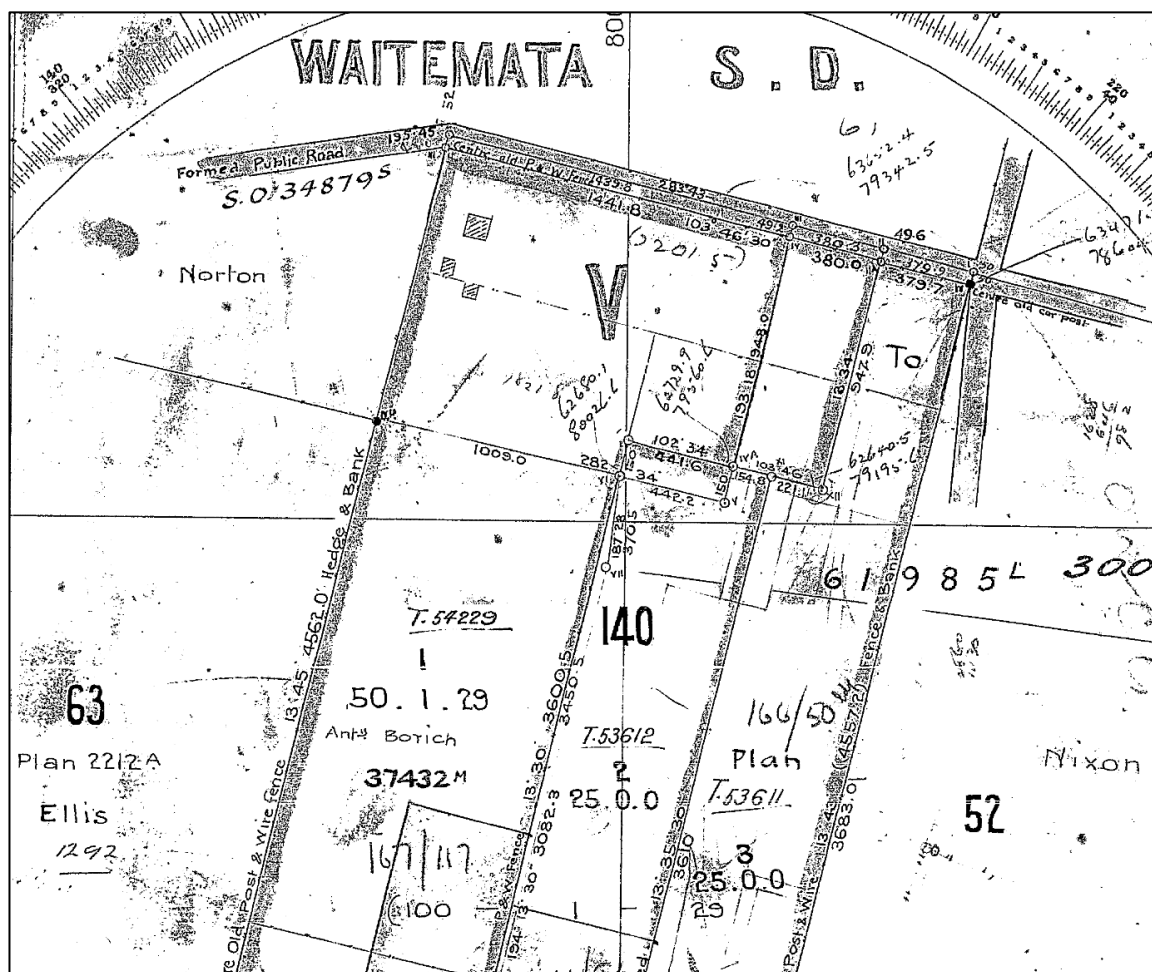


Figure 16 Detail from Plan DP 4818 showing the structures and the hedge and bank on the western boundary

A plan (DP 15592) titled 'Plan of Allots. 16, 61, 89 & 90, and Subdivn. of Pt. Allot. 16, Parish of Paremoremo' and surveyed for the New Zealand Paper Mills Company, is dated to 1921, and illustrates the water race that fed the Riverhead Paper Mill (formerly the flour mill) on the Rangitopuni Creek, running approximately east-west across the northern section of the Future Urban Zone area (Figure 17). An overlay of the features from the plan on an aerial image of the Plan Change area shows that the course of the water race forms the boundary between the northern part of Lot 1 DP 499822 and the southern part of Lot 20 DP 499876 (Figure 2, Figure 17 and Figure 18). The overlay also illustrates that the western projection of the southern part of Lot 20 DP499876 was formerly part of the reservoir (Figure 2, Figure 17 and Figure 18). The Riverhead Mill is recorded as site R11/721 on the New Zealand Archaeological Site Record Database (ArchSite) and the water race is deemed to be part of that site.

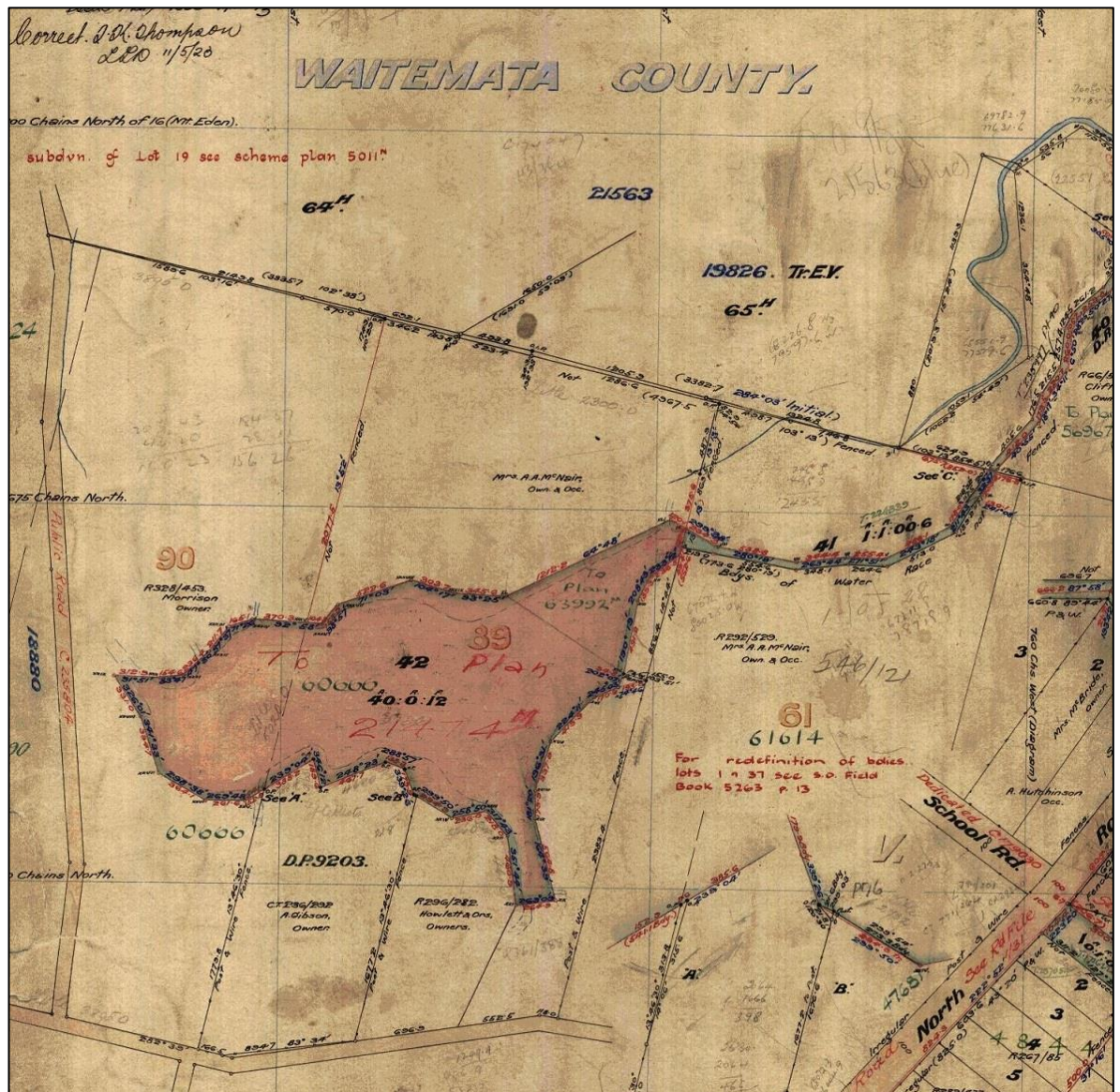


Figure 17. Plan DP 15592, dated 1921 showing the reservoir and the water race that supplied water power to the mill on the Rangitopuni Creek crossing the northern part of the FUZ area

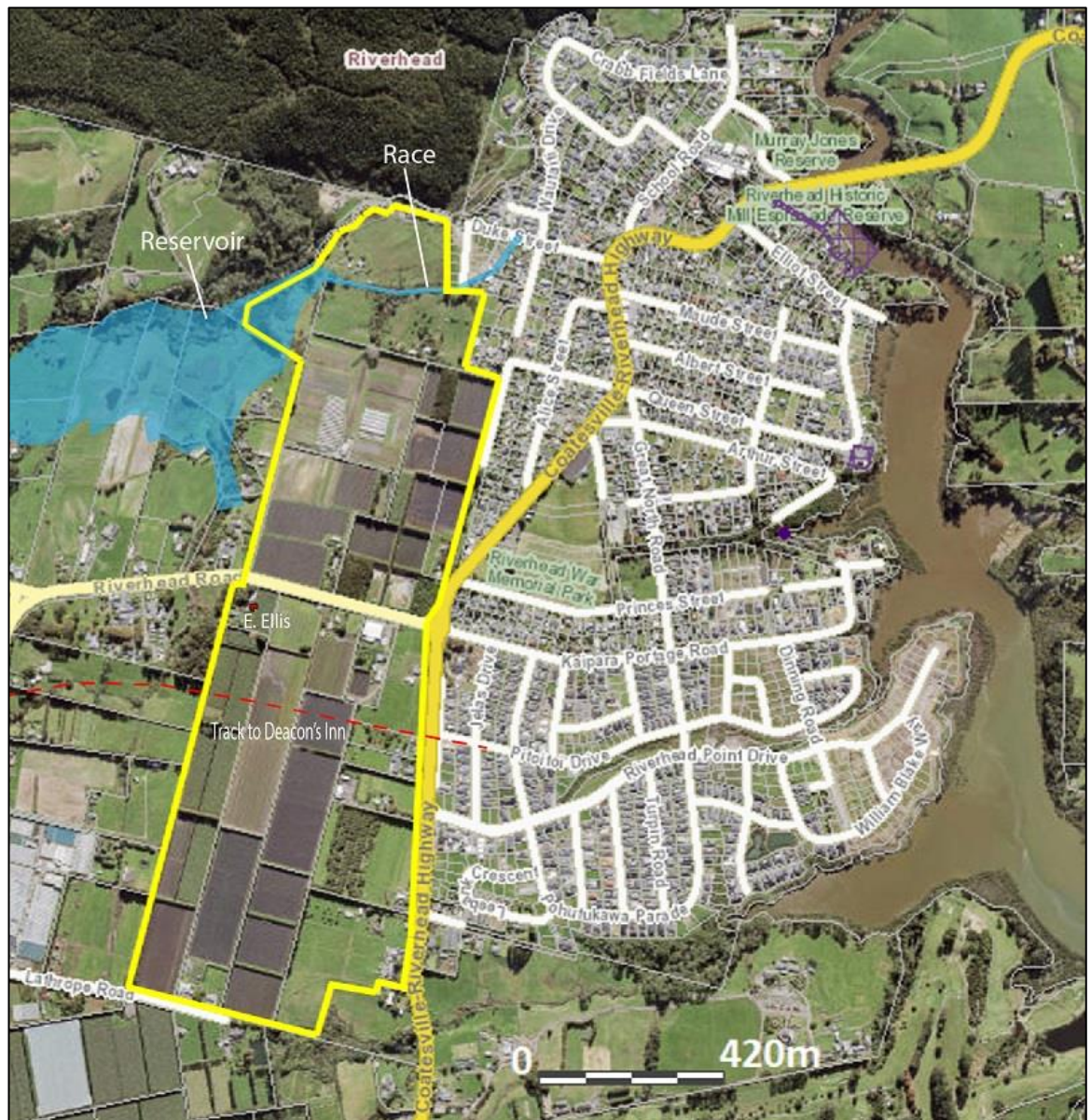


Figure 18. Overlay of features from the 19th and early 20th century plans with an aerial image showing the proposed Riverhead Future Urban Zone project area (outlined)

PHYSICAL ENVIRONMENT

Topography, Vegetation and Land use

The project area is situated immediately adjacent to the present western edge of the Riverhead Township. The topography of the area consists in the main of gentle sloping ground with occasional undulations, and is predominantly of arable land under cultivation with mature coniferous shelter breaks, interspersed with occasional rural residential and lifestyle lots. The far north of the project area consists of pasture, while there are also some substantial commercial glass houses present.

Geology and Geomorphology

The underlying geology of the project area consists of Tauranga Group Holocene Age alluvial soils over Waitemata Group sandstone/siltstone and occasional conglomerates. The Wautaiti Stream forms part of the northwestern boundary of the project area before joining the Rangitopuni Creek further to the north, while south of the Riverhead Road a small watercourse tributary of the Wautaiti is situated just to the west of the project area. There is also a small spring-fed watercourse adjacent to the southeastern corner of the project area, which flows eastward for approximately 1km before emptying into the Rangitopuni.

FIELD ASSESSMENT

Field Survey Results

The field survey was undertaken by Richard Shakles on 3 March 2022 under predominantly sunny skies with partial cloud cover, and an additional survey was completed on 23 August of Lot 1 DP 113506 which was originally not available to survey. Prior to the field survey the area was divided into a northern and southern zone with the Riverhead Road forming the boundary between the two areas, and the results of the field survey are presented per zone (Figure 19 and Figure 20).



Figure 19. The northern half of the survey area extending from Duke Street in the north to Riverhead Road in the south



Figure 20. The southern half of the survey area extending from the Riverhead Road in the north to Lathrope Road in the south and located adjacent and to the west of the Riverhead – Coatesville Highway. Note Lot 1 DP 113506 was not part of the March 2022 survey, but has been subsequently inspected

Northern Survey Area Results

Lot 20 DP 499876 and Lot 1 DP 499822

The field survey commenced in the far north of the project area on Lot 20 DP 499876 at 22 Duke Street, Riverhead, on land that will remain as rural. (Figure 19). The property is flat and under long, rank pasture with areas of large thick gorse bushes and a circa mid-20th century timber dwelling (Figure 21 (left and right)). There was no sign of the Riverhead mill race (part of site R10/721), although from the indicative route on the overlay (Figure 18, above) if still present as a channel it would have been obscured by the dense thickets of gorse. A channel visible as a linear depression running on an east-southeast to west-

northwest alignment was observed and represents a relatively modern drain that was cut to ease flooding on the property (Jennifer Henry – owner of 22 Duke Street, pers. comm.). Ms Henry also provided information that the mill race ran along the boundary of the property between the northernmost part of Lot 1 DP 499822 and the 22 Duke Street property, but that it had been blocked at some point after the development of the Te Roera Place subdivision which borders the eastern part of the property, and which necessitated the digging of the new drain (Jennifer Henry, pers. comm.). The southwestern part of the property consists of pasture grazed by cattle and is dotted with thickets of gorse (Figure 22, left). This part of the property also incorporates the eastern banks of the Wautaiti Stream (Figure 22, right).

Due to the overgrown nature of the boundary between the two properties no remains relating to the 19th century Riverhead Mill Race (R10/721) were observed within either Lot 20 DP 499876 or Lot 1 DP 49982. It is likely that no surface remains of the race and dam are extant due to farming practices, while subsurface remains of the race are highly likely to survive, and the feature therefore retains archaeological values.



Figure 21. Southwest-facing view across the flat terrain of the northernmost part of Lot 20 DP 499876 under rank pasture (left); and facing west-northwest and looking along the modern drain containing lush green grass seen cutting across the property (right)



Figure 22. South-facing view across the pasture currently grazed by cattle in the southwestern part of the Lot 20 DP 499876 property (left); and looking northwest along the Wautaiti stream that forms the western boundary of the property (right)

The Lot 1 DP 499822 property (30 Cambridge Road) borders the Lot 20 DP 499876 property to its north and west and private residential homes and small paddocks fronting onto Cambridge Road in the east (Figure 19). The property consists of a deeply cultivated strawberry field in the west that slopes significantly westwards (Figure 23, left) and which

descends from an elevated, broad flat ground in the centre and east of the property where a relatively modern dwelling and a large, gravelled yard area are situated (Figure 23, right). To the north of the yard area is another deeply cultivated strawberry field which slopes to both the north and west (Figure 24, left), while the eastern end of the property consists of a further arable field (Figure 24, right).

No archaeological features or deposits were observed within the Lot 1 DP 499822 property.



Figure 23. The cultivated strawberry field in the far west of the Lot 1 DP 499822 property (left); and the gravelled yard area in the centre of the property (right)



Figure 24. Cultivated strawberry field to the north of the yard area at Lot 1 DP 499822 (left); and the field comprising the north and eastern end of the property (right)

Lot 1 DP 164590 and Lot 2 164590

The Lot 1 DP 164590 and Lot 2 DP 164590 properties are situated in the east of the northern survey area and border Lot 2 109763 and Lot 1 DP 109763 to the west and private residences and the Z Petrol Station that are located off Cambridge Road and Coatesville – Riverhead Highway respectively to the east (Figure 19). Both properties consist of relatively flat to slightly sloping deeply cultivated strawberry fields fringed with shelter belts which predominantly comprise mature conifer trees (Figure 25, left). One of the fields also borders a private residential lot with a post mid-20th century home, garden and outbuildings situated at 1098 Coatesville-Riverhead Highway, but is also within Lot 2 DP 164590 (Figure 25, right). However, exceptions to the typical terrain or land use are found with a small kiwifruit orchard that borders Lot 2 109763 in the west (Figure 26, left) and, in the far south of Lot 1 DP 164590 where it fronts onto the Riverhead Road, there is a gravelled yard/turning area with mature trees and scrub (Figure 26, right).

No archaeological features or deposits were observed within either the Lot 1 DP 164590 or Lot 2 DP 164590 properties.



Figure 25. Typical terrain of cultivated strawberry fields with tall shelter belts present across both Lots 1 and 2 DP 164590 (left and right). The residence at 1098 Coatesville–Riverhead Highway can be seen in the background (right)



Figure 26. The small kiwifruit orchard situated in the west of Lot 1 DP 164590 (left); and the yard area in the far south of the same lot (right)

Lot 1 DP 109763 and Lot 2 DP 109763

Both Lots 1 and Lot 2 DP 109763 are bounded by rural properties to the west, and by Lots 1 and 2 DP 164590 to the east (Figure 19). Both properties consist of cultivated arable fields that slope westward from flatter ground in their eastern extents. Lot 1 DP 109763 is a large open field that has been deeply cultivated and is surrounded by shelter belts of coniferous trees, with occasional barns and other ancillary structures connected with cultivation and harvest (Figure 27, left and right).

Lot 2 DP is a very large square-shaped property consisting of both open, cultivated areas that are fringed with mature shelter belts of conifer trees, and substantial commercial greenhouses and agricultural buildings within its northern central area (Figure 28, left and right).



Figure 27. Facing southwest across Lot 1 DP 109763 (left); and looking northwest across a deeply cultivated strawberry field in the northern part of the property (right)



Figure 28. Looking west-northwest across the southern part of Lot 2 DP 109763 with the commercial greenhouses and agricultural buildings (left); and looking south across the same property (right)

Southern Survey Area Results

Lot 1 DP 164978

Lot 1 DP 164978 is located in the northwest corner of the southern survey area and is bounded by the Riverhead Road to the north, a rural property to the west and kiwifruit orchards to the south and east (Figure 20). The property has two private residences on it currently, with the older (306 Riverhead Road) being consistent with a c.1940s-1950s construction date, and a newer home at 298 Riverhead Road set further back from the road and to the west (Figure 29, left and right). A grassed area with old fruit trees surrounded by mature trees with a tall stand of mature gum trees (Figure 30, left and right) to the west appears to correlate with the area of the late 19th century house depicted on the 1891 plan (Figure 14 above) and almost certainly corresponds to the same building shown on the 1909 plan (Figure 15 above). There are also a number of mid- to late 20th century ancillary structures and water tanks on the property. There is also a kiwifruit orchard in the east of the property.

No remains relating to the late 19th century dwelling, or any other archaeological features or deposits were observed within Lot 1 DP 164978. However, while there is no extant 19th century structure on the property, it is likely that there are subsurface in situ remains related to the structure or to its occupation. The location of the dwelling has now been recorded on the NZAA ArchSite database as site R10/1537 (see Appendix A).



Figure 29. Looking southeast across the garden area immediately to the north of the dwelling at 298 Riverhead Road (left); and view southeast of the c.mid-20th century dwelling at 306 Riverhead Road (right)



Figure 30. South-facing view across the general area where the late 19th century house would have been located at Lot 1 DP 164978 (left); and view to the immediate west of where the house would have stood and toward the western boundary with tall mature gum trees present (right)

Lot 2 DP 164978

Lot 2 DP 164978 was bounded in the north by Lot 1 DP 164978 and by rural properties to the west, by Lathrope Road in the south and by Pt Lot 2 DP 37432 and Lot 1 DP 64605 in the east (Figure 20). The topography of the property is flat, and it consists of a kiwifruit orchard in the far north (Figure 31, left), while the remaining area consists of seven deeply cultivated arable fields fringed with predominantly mature coniferous shelter belts, although there were some old belts of mature macrocarpa trees here and there (Figure 31, right). The ground slopes away steeply on the western boundary, that perhaps corresponds with the ‘bank and hedge’ illustrated on the 1919 plan (see Figure 15, above).

No archaeological features or deposits were observed within Lot 2 DP 164978.



Figure 31. The kiwifruit orchard that forms the north of Lot 2 DP 164978 (left), and typical terrain of cultivated fields lying fallow and fringed by mature shelter belts of conifer or macrocarpa trees (right)

Lot 1 DP 64605 and Lot 2 DP 64605

These two properties are both bounded by Lathrope Road in the south, Lot 2 DP 164978 to the west, Lot 1 DP 113506 in the east, and by Pt Lot 2 DP 4818 and Pt Lot 2 DP 37432 to the north (Figure 20). In the southern part of Lot 1 DP 64605 where it fronts Lathrope Road is a commercial premises with industrial like structures, shipping containers and a brick and corrugated structure with yard (Figure 32, left) as well as a modern brick single level private residential home to the east. The majority of the property consists of a large, rectangular, deeply cultivated strawberry field that is surrounded by shelter belts of mature conifer trees (Figure 32, right).

The Lot 2 64605 property simply consists of three flat, square shaped, deeply cultivated strawberry fields (Figure 33).

No archaeological features or deposits were observed within Lot 1 or Lot 2 64605.



Figure 32. The commercial premises in the southwest of Lot 1 DP 64605 fronting Lathrope Road (left); and the large deeply cultivated strawberry field to the north of the commercial and residential premises (right)



Figure 33. Looking northeast across the second (from south) field of Lot 2 DP 64605 showing the typical flat terrain with deeply cultivated and still planted strawberry fields that currently forms part of the Zaberrri World fruit enterprise

Part Allotment 2 DP 37432

Part Allotment 2 DP 37432 is bounded by the Riverhead Road in the north, Lot 1 DP 64978 and Lot 2 DP 164978 to the west, by Lot 1 DP 64605 in the south and Pt Lot 2 DP 4818 in the east (Figure 20). The majority of the property consists of two deeply cultivated strawberry fields with the larger southern one still being planted (Figure 34, left) and the smaller one which fronts the Riverhead Road, having been freshly prepared for next season's strawberry crop (Figure 34, right). There are also a few 20th century agricultural sheds, as well as a circa mid-20th century brick-built house (in the northeastern corner of the property at 328 Riverhead Road).

Of note is a small weatherboard structure with an attached timber lean-to that is situated within a dense stand of trees and shrubs in the corner of the field that fronts on to Riverhead Road (Figure 35 and Figure 36). The main weatherboard structure contains at least two windows but could not be accessed due to the dense nature of the vegetation surrounding it; it is possible that the structure was originally an agricultural worker's cottage, or an agricultural storage structures. The structure is in a poor state of repair with visibly rotting timbers, while the lean-to is in a perilous state (Figure 36, left). While the date of the structure at this point is unknown, it has clearly been abandoned for some time, as the dense stand of vegetation that virtually conceals the structure attests, as well as the fact that a sizeable tree is growing from within the structure (Figure 35, Figure 36 and Figure 37).

No archaeological features or deposits were observed within Pt Lot 2 DP 37432, although it is possible that elements of the weatherboard structure could conceivably date to the late 19th century.



Figure 34. The very large deeply cultivated strawberry field that forms the majority of the southern part of Pt Lot 2 DP 37432 (left); and the smaller square, cultivated field that fronts on to Riverhead Road (right)



Figure 35. The dense stand of vegetation (arrowed) in which the weatherboard structure and lean-to is located within Pt Lot 2 DP 37432



Figure 36. The lean-to structure (left) attached to the small weatherboard hut / cottage structure (right)



Figure 37. Substantial sized tree growing out of a window of the structure with building and other waste seen piled up around it

Pt Lot 2 DP 4818 and Lot 1 DP 61985

Pt Lot 2 DP 4818 consists of flat land that is bounded by the Riverhead Road and Pt Lot 2 DP 37432 in the north and west, Lot 1 DP 61985 and rural residential lifestyle blocks (Lots 1-2 DP 7792, Lot 2 DP 63577) to the east and Lot 2 DP 64605 in the south (Figure 20). The property consists of substantial strawberry cultivations including large commercial greenhouses producing other berry fruits such as blueberries and raspberries, and forms the bulk of the Zaberri strawberry enterprise, with a packaging and distribution structure off the Riverhead Road in the north (Figure 38). The area includes a number of relatively modern mid- to later 20th century structures, as well as gravelled yards and lawned areas

(Figure 39). The property probably represents the most highly modified environment of the Southern survey area.

The Lot 1 DP 61985 property, to the north of Lot 1 DP 7792 and east of Pt Lot 2 DP 4818, consists of flat predominantly grassed lawned areas with an ice cream and fruit sales café shop along with a children’s inflatable obstacle course, zorbing, and other entertainment activities, as well as a grassed car parking area (Figure 40).

No archaeological features or deposits were observed within Pt Lot 2 DP 4818 or Lot 1 DP 61985.



Figure 38. Looking northeast across the large strawberry field in Pt Lot 2 DP 4818 (left); and the commercial greenhouses to the south of the strawberry field (right)



Figure 39. Lawned areas in the northwest of Pt Lot 2 DP 4818 (left); and lawned area with mature macrocarpas and later 20th century structures in the same property (right)



Figure 40. Looking northeast across the yard in front of the Zaberri ice cream shop in Lot 1 DP 61985 (left); and looking southwest across lawned car parking area and the obstacle course in the distant centre right

Lot 1 DP 7792, Lot 2 DP 7792 and Lot 2 DP 63577

The Lot 1 DP 7792, Lot 2 DP 7792 and Lot 2 DP 63577 properties are all situated off the Coatesville – Riverhead Highway, and all back onto the Zaberri strawberry cultivations in the west, while Lot 2 DP 63577 is also bounded by the large rural property of Lot 1 DP 113506 in the south (Figure 20) and Lot 1 DP 7792 is bounded by Lot 1 DP 61985 in the north. Lot 1 DP 7792 consists of flat land, that has a relatively modern private dwelling as well as a florist’s shop at the front of the property and large ornamental gardens to the rear (Figure 41, left). Lot 2 DP 7792 also consists of flat topography and has a private residence and large garden and paddock to the rear (Figure 41, right).

The property at Lot 2 DP 63577 has two relatively modern structures at the front of the property, a large flat grassed paddock and a sizeable chestnut tree orchard (Figure 42).

No archaeological features or deposits were observed within Lot 1 DP 7792, Lot 2 DP 7792 or Lot 2 DP 63577.

Lot 3 DP 63577, located between Lot 2 DP 7792 and Lot 2 DP 63577, was not accessible for survey, but is on flat land similar to the two residential properties to the north (Lots 1 and 2 DP 7792). Aerial views (e.g. Figure 20) show a large, grassed area with a driveway to the rear (west) and a number of structures. It is considered unlikely that any subsurface archaeology is present on this property due to the similarities to the above lots.



Figure 41. Looking south across the ornamental gardens in the rear half of Lot 1 DP 7792 (left); and the grassed paddock area with conifer shelter belt in the rear of Lot 2 DP7792 (right)



Figure 42. Looking east-northeast across the grassed paddock in Lot 2 DP 63577 with the chestnut tree orchard in the background.

Additional Field Survey - Lot 1 DP 113506

Lot 1 DP 113506 was unable to be surveyed during the original March 2022 survey, and was instead surveyed on 23 August 2022 under clear, sunny skies.⁴

Lot 1 DP 113506 is bounded to the north by Lot 2 DP 63577, in the east by the Coatesville-Riverhead Highway and the properties at 1200 and 1210 Coatesville-Riverhead Highway, in the west by Lot 2 DP 64605, and in the south by Lot 1 DP 137779 (Figure 20).

The northern half of the property consisted of two relatively modern residential dwellings, the larger of which is accessed down a long driveway. There are also a number of agricultural shed structures and a deeply cultivated strawberry field, with wide grass strip around it on all sides (Figure 43). To the south and southeast of the strawberry field was another larger deeply cultivated field also planted with a crop of strawberries (Figure 44). The field extended southward to a previously cultivated but currently fallow area which sloped steeply to a very wet and boggy low-lying area that bordered a watercourse that runs close to the southern boundary of the property and is a branch of the upper reaches of a stream that flows eastward into an inlet of the Rangitopuni Creek (Figure 45). The area is overgrown, and two clumps of taro were observed on the northern bank of the small watercourse, while large stands of the invasive South American pest plant woolly nightshade was present especially to the west and east of the boggy area (Figure 46). The eastern part of the property consisted of a long wide, strip of grass that ran along the eastern

⁴ The property was made available for survey following a Clause 23 request from Auckland Council for the Lot to be surveyed for potential archaeology.

boundary with the property at 1200 Coatesville-Riverhead Highway (Lot 1 DP 66488) and also the south-eastern boundary with the property at 1210 (Lot 2 DP 113506) (Figure 47, left). The property extends eastward in the north-eastern corner where a fenced field is under pasture and the smaller of the two dwellings is situated adjacent to the Coatesville-Riverhead Highway (Figure 47, right).

No archaeological features or deposits were observed within Lot 1 DP 113506.



Figure 43 Southwest view across the strawberry field in the northwest of Lot 1 DP 113506 (left) and looking east along the northern boundary of the property with the agricultural buildings and house (right)



Figure 44 View southeast across the larger, southern strawberry field (left) and northeast view across the same field toward the eastern boundary of the property along the Coatesville-Riverhead Highway (right)



Figure 45 View south from the fallow area to the south of the strawberry field (left) and looking north-northeast across the boggy area adjacent to the watercourse along the southern boundary of Lot 1 DP 113506 and upslope toward the strawberry fields (right)



Figure 46 One of the taro plants growing along the northern bank of the small watercourse that runs close to the southern boundary of Lot 1 DP 113506 (left) and looking southwest across the boggy area toward the large stands of woolly nightshade (right)



Figure 47 Looking north along the wide grassed strip along the eastern boundary of Lot 1 DP 113506 (left) and view northeast across the pasture field toward the smaller dwelling in the north-eastern corner of the property adjacent to the Coatesville-Riverhead Highway (right)

DISCUSSION AND CONCLUSIONS

Summary of Results

There are two archaeological sites situated within the Riverhead Plan Change Area. The first site consists of the Riverhead Mill water race (part of the Riverhead Mill site R10/721), the course of which has been determined to run along the southeastern boundary of Lot 20 DP 499876 with the northeastern part of Lot 1 DP 499822 in the far north of the project area. The second is the site of a former late 19th century house with possible outbuildings (R10/1537) located on the Lot 1 DP 164978 property at 298 Riverhead Road, which has been recorded as a result of the research and survey undertaken for this assessment. The field survey established that the majority of the project area is under market gardening cultivation, with most properties divided into deeply cultivated strawberry fields, with a few kiwifruit orchards, as well as other crops grown. The market gardening / arable farming of the area would have begun in the late 19th century following the clearance of kauri forest and subsequent gum digging activities. The heavy clay soils of the inland area away from the shoreline of the Upper Waitematā Harbour and Rangitopuni Creek would not have been attractive for either pre-European contact period Māori or historic period Māori and indeed the field survey found no evidence of Māori occupation within the project area. However, the route of the Te Taonga Waka (Auckland CHI site no. 141) would have crossed the northern part of the Plan Change Area to the south of Riverhead Road. It is extremely likely that the mid-19th century trackway to Deacon's Inn would have followed this well-established waka portage and would have crossed land (in order from west to east) that today forms part of the properties of Lot 2 DP 164978; Pt Lot 2 DP 37432; Pt 2 Lot DP 4818, and Lot 1 DP 61985. However, any tangible remains of the portage route or evidence of Māori settlement activities that may once have been present within the Plan Change Area, will have almost certainly been lost due to the repeated episodes of ploughing associated with the deeply cultivated fields would have truncated any such evidence.

Māori Cultural Values

This is an assessment of effects on archaeological values and does not include an assessment of effects on Māori cultural values. Such assessments should only be made by the tangata whenua. Māori cultural concerns may encompass a wider range of values than those associated with archaeological sites.

The historical association of the general area with the tangata whenua is evident from the recorded sites, traditional histories and known Māori place names.

Survey Limitations

It should be noted that archaeological survey techniques (based on visual inspection and minor sub-surface testing) cannot necessarily identify all sub-surface archaeological features, or detect wahi tapu and other sites of traditional significance to Māori, especially where these have no physical remains.

Additionally, Lot 3 DP 63577 was unable to be accessed for survey.

Archaeological Value and Significance

The Riverhead Plan Change Area has no known archaeological values relating to pre-1900 Māori settlement and is unlikely to contain any unidentified subsurface remains connected with former Māori activities in the area. While the Te Taonga Waka portage is known to have crossed the northern half of the Plan Change Area situated to the south of the Riverhead Road, any surface and subsurface remains relating to its use will have been lost to the century or more of deep ploughing that has occurred in the area.

However, in terms of sites relating to early European settlement of the area there is potential for subsurface archaeological remains relating to both the Riverhead Mill water race (part R10/721) on Lot 20 DP 499876 (22 Duke Street), and the site of the former late 19th century Ellis house (R10/1537) on Lot 1 DP 164978 (298 Riverhead Road).

The Auckland Unitary Plan Operative (AUP OP) identifies several criteria for evaluating the significance of historic heritage places. In addition, Heritage NZ, has provided guidelines setting out criteria that are specific to archaeological sites (condition, rarity, contextual value, information potential, amenity value and cultural associations) (Heritage NZ 2019: 9-10). Both sets of criteria have been used to assess the value and significance of the archaeological sites within the Riverhead Plan Change Area (see Table 2 to Table 5).

The archaeological value of sites relates mainly to their information potential, that is, the extent to which they can provide evidence relating to local, regional and national history using archaeological investigation techniques, and the research questions to which the site could contribute. The surviving extent, complexity and condition of sites are the main factors in their ability to provide information through archaeological investigation. For example, generally pa are more complex sites and have higher information potential than small midden (unless of early date). Archaeological value also includes contextual (heritage landscape) value. Archaeological sites may also have other historic heritage values including historical, architectural, technological, cultural, aesthetic, scientific, social, spiritual, traditional and amenity values.

Overall, sites R10/721 and R10/1537 are considered to have low archaeological values based on the criteria discussed.

Table 2 Assessment of the historic heritage significance of site R10/721 (archaeological site) based on the criteria in the AUP OP (Chapter B5.2.2)

Criterion	Comment	Significance Evaluation
a) historical: The place reflects important or representative aspects of national, regional or local history, or is associated with an important event, person, group of people or idea or early period of settlement within New Zealand, the region or locality	The mill race structure supplied the water to the mill and was therefore an integral part of Brigham's and then Lamb's Flour Mill operations at Riverhead from the mid-19 th century which supplied Auckland with flour.	Moderate
b) social: The place has a strong or special association with, or is held in high esteem by, a community or	The structure is not linked to a particular community	Little

cultural group for its symbolic, spiritual, commemorative, traditional or other cultural value	and has no known social values.	
c) Mana Whenua: The place has a strong or special association with, or is held in high esteem by, Mana Whenua for its symbolic, spiritual, commemorative, traditional or other cultural value	To be determined by mana whenua	Not assessed
d) knowledge: The place has potential to provide knowledge through scientific or scholarly study or to contribute to an understanding of the cultural or natural history of New Zealand, the region, or locality	The structure has very little potential to provide knowledge as it was simply an earth cut channel confined within earthen banks.	Little
e) technology: The place demonstrates technical accomplishment, innovation or achievement in its structure, construction, components or use of materials	The structure within the Plan Change area has no known technical values as it was simply an earth cut channel within earthen banks.	Little
f) physical attributes: The place is a notable or representative example of a type, design or style, method of construction, craftsmanship or use of materials or the work of a notable architect, designer, engineer or builder;	The structure as currently assessed has no particular physical attributes indicating notability.	Little
g) aesthetic: The place is notable or distinctive for its aesthetic, visual, or landmark qualities	The structure likely survives subsurface only, and is low lying and is located on private land.	Little
h) context: The place contributes to or is associated with a wider historical or cultural context, streetscape, townscape, landscape or setting	The structure contributes to the 19 th century milling history of Riverhead, and represents an important early industry that provided Auckland with flour.	Moderate

Table 3 Assessment of the archaeological values of site R10/721 (part section of Riverhead Mill Race) based on Heritage NZ criteria (Heritage NZ 2019: 9-10)

Value	Assessment
Condition	<i>The mill race is likely infilled or at least partially infilled and likely does remain in good condition subsurface.</i>
Rarity	<i>19th century mill races for flour mills are rare in Auckland.</i>
Contextual value	<i>The mill race forms an integral link with Brigham's and Lamb's mid-19th century to 1898 flour mill operations and subsequently the Riverhead Paper Mill as it provided the water necessary for milling operations. It is noted that almost all the remaining stretch of the mill race has already been impacted by residential developments north of</i>

	<i>Duke Street, although the section that is in the vicinity of the mill building itself should survive in good order subsurface.</i>
Information potential	<i>There is very limited potential for the investigation and scientific analysis of any archaeological remains to provide important information in relation to the use of the mill race during the 19th century as it was simply an earth cut channel that was confined between earthen banks. Any sections of the race exposed could also provide information relating to its size and depth.</i>
Amenity value	<i>Currently on private land with low amenity values. However, a section of the mill race could be incorporated within a reserve as part of future development, with information panels to share knowledge of its role in the industry of early Riverhead.</i>
Cultural associations	<i>Mid-19th century European industry.</i>
Other	<i>The site has historical values relating to the mid to late 19th European settlement and industry of the Riverhead area.</i>

Table 4 Assessment of the historic heritage significance of site R10/1537 (archaeological site) based on the criteria in the AUP OP (Chapter B5.2.2)

Criterion	Comment	Significance Evaluation
a) historical: The place reflects important or representative aspects of national, regional or local history, or is associated with an important event, person, group of people or idea or early period of settlement within New Zealand, the region or locality	The structure formed part of the later 19 th century settlement and farming history of Riverhead.	Little
b) social: The place has a strong or special association with, or is held in high esteem by, a community or cultural group for its symbolic, spiritual, commemorative, traditional or other cultural value	The structure is not linked to a particular community and has no known social values.	Little
c) Mana Whenua: The place has a strong or special association with, or is held in high esteem by, Mana Whenua for its symbolic, spiritual, commemorative, traditional or other cultural value	To be determined by mana whenua	Not assessed
d) knowledge: The place has potential to provide knowledge through scientific or scholarly study or to contribute to an understanding of the cultural or natural history of New Zealand, the region, or locality	Subsurface remains such as foundations, refuse pits and possibly a well would have some potential to provide knowledge of building construction/style lifestyle and use of the house by the occupants.	Little/moderate

e) technology: The place demonstrates technical accomplishment, innovation or achievement in its structure, construction, components or use of materials	The structure does not survive above ground and has no known technical values.	Little
f) physical attributes: The place is a notable or representative example of a type, design or style, method of construction, craftsmanship or use of materials or the work of a notable architect, designer, engineer or builder;	The structure does not survive above ground and therefore physical attributes cannot be assessed.	Little
g) aesthetic: The place is notable or distinctive for its aesthetic, visual, or landmark qualities	The place is not notable or distinctive for its aesthetic, visual, or landmark qualities.	Little
h) context: The place contributes to or is associated with a wider historical or cultural context, streetscape, townscape, landscape or setting	There are no above ground structural remains and the house was not owned by a notable early family well known in the area does not survive above ground.	Little

Table 5 Assessment of the archaeological values of site R10/1537 (part section of Riverhead Mill Race) based on Heritage NZ criteria (Heritage NZ 2019: 9-10)

Value	Assessment
Condition	<i>The villa does not survive above ground and the condition of any subsurface remains relating to the 19th century settlement of the house is not known.</i>
Rarity	<i>19th century villas are not rare in Auckland.</i>
Contextual value	<i>The villa building formed part of the later 19th century settlement of the Riverhead area. There are few surviving 19th century houses in the wider area.</i>
Information potential	<i>There is potential for the investigation and scientific analysis of any archaeological remains to provide important information relation to use of the house by 19th century occupants. Any foundations exposed could also provide information relating to the design and construction of the villa, including materials and technique of both the original structure and the later additions/alterations.</i>
Amenity value	<i>Nil. No above structural remains survive.</i>
Cultural associations	<i>Late 19th century European.</i>
Other	<i>The site has historical values relating to the late 19th European settlement of the rural Riverhead area.</i>

Potential Effects of Future Development

Future urban residential development enabled by the proposed Riverhead Structure Plan and Plan Change would have the potential for adverse effects on subsurface archaeological remains of both the Riverhead Mill water race (part R10/721) and the site of the former late 19th century Ellis house (R10/1537). If these two sites are affected by future development, any adverse effects could be appropriately managed and mitigated through archaeological monitoring and the investigation and recording of any remains exposed under the archaeological provisions of the HNZPTA. However, as Lot 20 DP 499876 will be zoned as Mixed Rural, and the section of mill race within the proposed plan change area is limited to a short stretch along the boundary of the far southeast of Lot 20 DP 499876 and the northeast of Lot 1 DP 499822, the potential for the mill race to be impacted by future development is therefore substantially lessened. If the mill race was to be impacted, a section of the mill race could be reinstated and conserved within a reserve setting with interpretive signage boards as mitigation. Information panels could also be incorporated to mark out and show the route taken by the Te Taonga Waka portage.

Future development enabled by the proposed Riverhead Structure Plan and Plan Change will have no known effects on archaeological values relating to Māori settlement as no archaeological sites relating to Māori settlement and land use have been recorded within the boundaries of the Plan Change Area and none were identified during the survey for this assessment. Moreover, there are no recorded Māori archaeological sites inland or in close proximity to the Plan Change Area. Māori archaeological sites in the general area are situated on the banks of the Rangitopuni Creek, and are all at least 1km away to the east. However, there is a possibility that the land now enclosed as Lot 1 DP 113506 may have been more advantageous for Māori settlement, with a freshwater supply and close access to the Rangitopuni Creek.

In any area where archaeological sites have been recorded in the general vicinity it is possible that unrecorded subsurface remains may be exposed during development. While it is considered unlikely within the proposed Plan Change Area based on the reasons outlined above, the possibility is provided for under the AUP (OP) Accidental Discovery Rule (E12.6.1).

There are no scheduled historic heritage places in the Plan Change Area.

Resource Management Act 1991 Requirements

Section 6 of the RMA recognises as matters of national importance: ‘the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga’ (S6(e)); and ‘the protection of historic heritage from inappropriate subdivision, use, and development’ (S6(f)).

All persons exercising functions and powers under the RMA are required under Section 6 to recognise and provide for these matters of national importance when ‘managing the use, development and protection of natural and physical resources’. There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (S17), including historic heritage.

Historic heritage is defined (S2) as ‘those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities: (i) archaeological; (ii) architectural; (iii) cultural; (iv)

historic; (v) scientific; (vi) technological’. Historic heritage includes: ‘(i) historic sites, structures, places, and areas; (ii) archaeological sites; (iii) sites of significance to Māori, including wahi tapu; (iv) surroundings associated with the natural and physical resources’.

Regional and district plans contain sections that help to identify, protect and manage archaeological and other heritage sites. The plans are prepared under the provisions contained in Part 5 of the RMA. The Auckland Unitary Plan Operative in Part 2016 (AUP OP) is relevant to the proposed activity. The relevant chapters relating to heritage are: RPS Chapter B5. Ngā rawa tuku iho me te āhua – Historic heritage and special character, Chapter D 17 Historic Heritage Overlay, Schedule 14.1 Schedule of Historic Heritage and Schedule 14.3 Historic Heritage Place Maps.

There are no scheduled historic heritage sites located within the proposed Riverhead Structure Plan and Plan Change Area.

This assessment has established that while the proposed Plan Change will have no effects on any known archaeological remains, future developments enabled by the Plan Change would have the potential to adversely affect unrecorded subsurface remains relating to the Riverhead Mill water race and the site of a late 19th century house within Lot 1 DP 499822 (30 Cambridge Road) and Lot 1 DP 164978 (298 Riverhead Road) respectively. These sites have been assessed under the Auckland Regional Policy Statement criteria (AUPOP (Chapter B5.2.2)) as part of this assessment and are considered to retain limited archaeological values. If future resource consents are granted within these lots, consent conditions relating to archaeological monitoring or protection can be applied, with any mitigation of adverse effects through archaeological investigation and recording undertaken under the archaeological provisions of the HNZPTA. The potential for adverse effects on unrecorded sites elsewhere within the Plan Change Area is considered to be low and can be managed under the AUP OP Accidental Discovery Rule (E12.6.1). Under the Rule works must cease within 20m of the discovery and the Council, Heritage NZ, Mana Whenua and (in the case of human remains) NZ Police must be informed. The Rule would no longer apply in respect to archaeological sites if an Authority from Heritage NZ was in place.

Heritage New Zealand Pouhere Taonga Act 2014 Requirements

In addition to any requirements under the RMA, the HNZPTA protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority to modify an archaeological site has been issued by Heritage NZ (Section 42).

An archaeological site is defined by the HNZPTA Section 6 as follows:

‘**archaeological site** means, subject to section 42(3), –

(a) any place in New Zealand, including any building or structure (or part of a building or structure) that –

(i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and

(ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and

(b) includes a site for which a declaration is made under section 43(1)⁵

Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (Section 44(a)), or to modify a specific archaeological site where the effects will be no more than minor (Section 44(b)), or for the purpose of conducting a scientific investigation (Section 44(c)). Applications that relate to sites of Māori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapu and are subject to the recommendations of the Māori Heritage Council of Heritage NZ. In addition, an application may be made to carry out an exploratory investigation of any site or locality under Section 56, to confirm the presence, extent and nature of a site or suspected site.

Future development enabled by the proposed Plan Change has the potential to affect subsurface remains of the Riverhead Mill water race (part of R10/721) along the northern most boundary of Lot 1 DP 499822 and subsurface remains at the site of a former late 19th century house (R10/1537) within Lot 1 DP 164978. Any subsurface remains associated with these sites would be subject to the archaeological provisions of the HNZPTA. It is considered likely that subsurface remains associated with the water race in the form of the backfilled channel are present, as the property has long been used as pasture and has not undergone any major modifications. It is also considered likely that subsurface remains associated with the late 19th century Ellis house and its associated outbuildings are present, as the existing house at 298 Riverhead Road is situated much further back in the property than the original house. Subsurface features could include postholes, outbuilding foundations, rubbish pits and a well.

An archaeological authority would be required for any future development enabled proposed Plan Change that affects sites R10/721 and R10/1537. The conditions of any authority issued by Heritage NZ would include the requirement for archaeological investigation and recording of any remains affected to recover information relating to the history of the area, to offset the adverse effects on the sites.

The archaeological provisions of the HNZPTA would also apply to any unrecorded sites exposed during development.

Conclusions

No archaeological or other historic heritage sites have been previously recorded within the proposed Riverhead Structure Plan and Plan Change Area. As it is not situated along the coast or in close proximity to Rangitopuni Creek (where archaeological sites in the general area are located) it is considered unlikely that the Riverhead Structure Plan and Plan Change Area would contain subsurface archaeological remains associated with Māori settlement or activities. As such, the likelihood of encountering Māori archaeological sites during future development enabled by the Plan Change is considered to be low and is provided for under the AUP OP Accidental Discovery Rule.

Results of this assessment have established there are no sites scheduled on the AUPOP within the Riverhead Structure Plan and Plan Change Area. However, two archaeological sites relating to early European settlement have been identified. The mid-19th century

⁵ Under Section 42(3) an Authority is not required to permit work on a pre-1900 building unless the building is to be demolished. Under Section 43(1) a place post-dating 1900 (including the site of a wreck that occurred after 1900) that could provide 'significant evidence relating to the historical and cultural heritage of New Zealand' can be declared by Heritage NZ to be an archaeological site.

Riverhead Mill water race (part of the previously recorded Riverhead Mill site R10/721) running between the far southeastern boundary of the property at 22 Duke Street, and the northeastern part of Lot 1 DP 499822 at 30 Cambridge Road. The other is the site of the former late 19th century Ellis house at 298 Riverhead Road, now recorded as R10/1537. There is potential for subsurface archaeological remains of both sites to be present and affected by future development enabled by the Plan Change. If so, appropriate management and mitigation measures will be required. Archaeological monitoring, investigation and recording to recover information relating to the history of the Riverhead area would be appropriate mitigation of any unavoidable adverse effects on subsurface archaeological remains, and this is provided for under the archaeological authority provisions of the HNZPTA.

RECOMMENDATIONS

- Any adverse effects resulting from future development enabled by the proposed Riverhead Structure Plan and Plan Change area can be appropriately managed and mitigated under the archaeological provisions of the HNZPTA.
- Any future development plans within Lot 1 DP 499822 (30 Cambridge Road) and Lot 1 DP 164978 (298 Riverhead Road), where the two recorded archaeological sites (part R10/721 and R10/1537) are located, should be subject to further archaeological assessment at the resource consent stage to establish the effects on archaeology and to identify any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA).
- Any future development along the northern boundary of Lot 1 DP 499822 (30 Cambridge Road) could also consider preserving a section of mill race within a reserve setting with associated information panels.
- Elsewhere within the proposed Riverhead Structure Plan and Plan Change Area the Accidental Discovery Rule (section E.12.6.1 of the AUP OP) should be relied on to provide for any additional unrecorded archaeological sites that may be present, as the potential for these is low.
- Since archaeological survey cannot always detect sites of traditional significance to Māori, such as wāhi tapu, the tangata whenua should be consulted regarding the possible existence of such sites within the proposed Riverhead Structure Plan and Plan Change Area.



BIBLIOGRAPHY

- Angus, J. H. 1976. *Papermaking Pioneers: A History of New Zealand Paper Mills Ltd.* Mataura: NZ Paper Mills Ltd.
- Annandale, D. (ed.). 1999. *1899 – 1999 Taupaki School and District History.* Taupaki: Taupaki School Centenary Committee.
- Auckland Council Cultural Heritage Inventory, accessed at <http://maps.aucklandcouncil.govt.nz> and <https://chi.org.nz>.
- Bioresearches. 1996. An Archaeological Survey of the Proposed Enerco Gas Pipeline.
- Campbell, M., J. Harris and A. McAlister. 2013. Auckland Council North and North West Rural Urban Boundary options: cultural heritage overview. CFG Heritage Ltd report for Auckland Council.
- Clough R. and B. Baquié. 2000. A Preliminary Cultural Heritage Assessment for the Kumeu-Huapai Structure Plan, Rodney District Council. Clough & Associates report prepared for Urban Initiatives.
- Clough, R., B. Baquié, D. Prince, K. Tatton and S. Macready. 2011. Riverhead Mill Investigations (Site R10/721). Clough & Associates report in fulfilment of NZHPT Authorities 2003/144, 147 and 247.
- Clough, R. and D. Prince. 1998. Enerco Natural Gas Pipelines: Archaeological Assessment. Clough & Associates report.
- Clough, R. and D. Prince. 1999. Waiarohia Structure Plan Area: Archaeological Assessment. Clough & Associates report prepared for Waitakere City Council.
- Clough R., K. Tatton, S. Macready and P. Reed 2005. Riverhead Mill Conservation Plan. Clough & Associates report prepared for Auckland Regional Council.
- Dunsford, D. 2002. *Doing It Themselves: The Story of Kumeu, Huapai and Taupaki.* Publishing Press Ltd., Auckland.
- Graham, G. 1925. The history of the Kawerau tribe of Waitakere. *Journal of the Polynesian Society*, 34: 19–23.
- Heritage NZ. 2019. Writing Archaeological Assessments. Archaeological Guidelines Series No. 2.
- Kawharu, M. n.d. Helensville Pioneer Museum Website: Pre-European History - Ngati Whatua <http://www.helensvillemuseum.org.nz/history/preeuropean.htm>.
- Madden, I. B. 1966. *Riverhead: The Kaipara Gateway.* Auckland: The Riverhead Jubilee Association.
- Murdoch, G.J. Nov 1988. Auckland Regional Authority Future Water Supply Study Phase 4 Background Report No. 5. 4 – Historical Perspectives on the Southern Kaipara, Lower Waikato and Wairoa Valley. Part I. Southern Kaipara. KRTA Ltd and Tonkin and Taylor Ltd, in Association with ARA Regional Planning Department Consultancy Group.
- New Zealand Archaeological Association ArchSite Database, accessed at <http://www.archsite.org.nz>.
- New Zealand Heritage List, accessed at <http://www.historic.org.nz>.
- Phear, S. and R. Shakles. 2014. Proposed Residential Development, Riverhead South, Part Precinct 4 (Knox Block): Addendum to 2011 Archaeological Assessment. Clough & Associates report prepared for Cato Bolam Consultants and Jessie Trust Holdings Ltd.
- Phear, S. and R. Shakles. 2015. Proposed Residential Subdivision at 70 Kaipara Portage Road, Riverhead: Archaeological Assessment. Clough & Associates report prepared for Cato Bolam Consultants on behalf of Chuanglie International Developments Ltd.

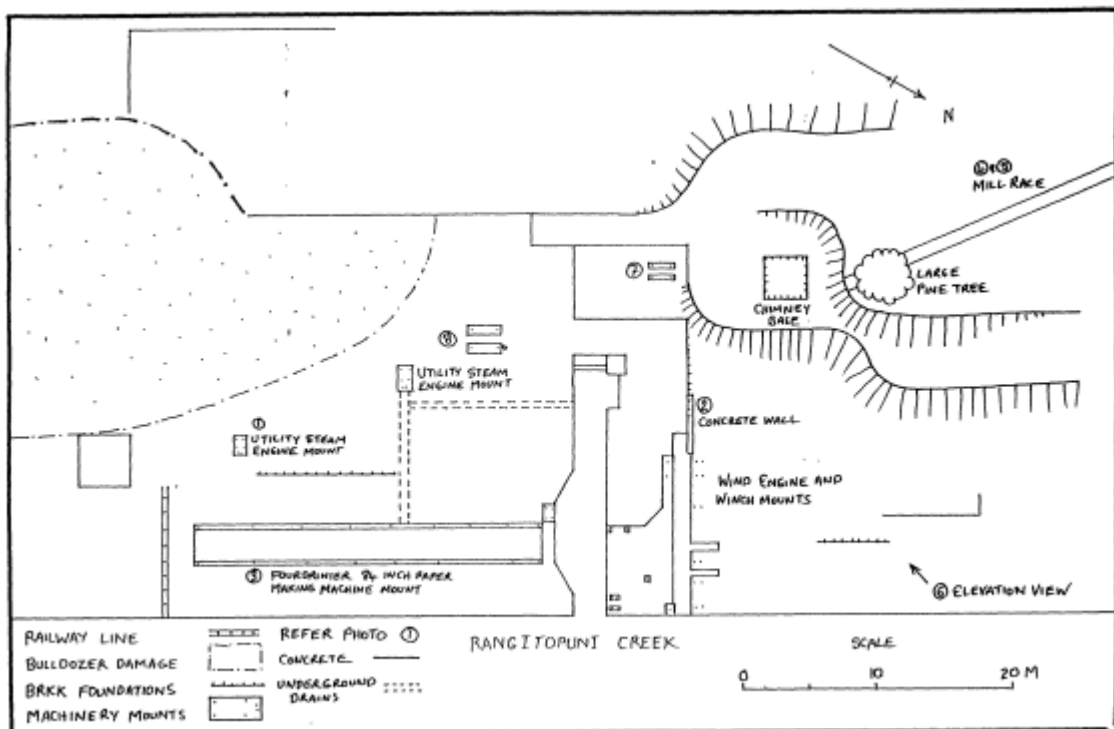
- Phillips, K. 1994. An Investigation into the History and Remains of Lambs Flour Mill and the Riverhead Paper Mill Site R10/721. Paper 03.330 Department of Anthropology, University of Auckland.
- Plowman, M. 2009. Proposed Walkway at the Murray Jones & Riverhead Mill Reserves Riverhead. Archaeological Assessment of Effects. Opus International Consultants Ltd report.
- Shakles, R., S. Phear and R. Clough. In prep.(a). 15-17 Duke Street, Riverhead, Auckland: Final Archaeological Investigation Report (Sites R10/721 and R10/1376). Clough & Associates report in Accordance with NZHPT Authority No. 2013/379.
- Shakles, R., S. Phear and R. Clough. In prep.(b). 29 Dinning Road, Riverhead, Auckland: Final Archaeological Investigation Report in Accordance with NZHPT Authority No. 2017/207. Clough & Associates report prepared for Cabra Developments Ltd.
- Shakles, R., S. Phear and R. Clough. 2013. 15-17 Duke Street, Riverhead, Auckland: Preliminary Archaeological Investigation Report (Sites R10/721 and R10/1376). Clough & Associates Ltd unpublished report prepared for Scrooge and Marley Ltd. In Accordance with NZHPT Authority No. 2013/379.
- Shakles, R. and R. Clough. February 2011. Kumeu River Flood Protection Stage II, Kumeu, Rodney District: Archaeological Assessment. Clough & Associates report prepared for URS New Zealand Ltd.
- Shakles, R. and R. Clough. April 2011. Proposed Residential Development, Riverhead: Archaeological Assessment. Clough & Associates Ltd report prepared for Cato Bolam Consultants Ltd and Jessie Trust Holdings Ltd.
- Shakles, R. and R. Clough. November 2011. Proposed Residential Development, Riverhead, Precinct 2: Archaeological Assessment. Clough & Associates Ltd report prepared for Cato Bolam Consultants Ltd, Noel Allen and Steve Jelas.
- Shakles, R. and R. Clough. 2012. Proposed Development on Lot 3 DP49294, Dinning Road, Riverhead, Auckland: Archaeological Assessment Clough & Associates report prepared for Patricks Bay Developments Ltd.
- Shakles, R., S. Phear and R. Clough. 2011. Kumeu Huapai Riverhead Local Reticulation Network: Archaeological Assessment. Clough & Associates Ltd report prepared for GHD Planning on behalf of Watercare Ltd.
- Shakles, R., S. Phear and R. Clough. 2012. Proposed Residential Subdivision, 15-17 Duke Street, Riverhead, Auckland: Archaeological Assessment. Clough & Associates Ltd report prepared for Terra Nova Planning Ltd.
- Taonui, R. 2008. 'Tāmaki tribes', Te Ara - the Encyclopaedia of New Zealand, updated 7-Apr-2008, URL: <http://www.TeAra.govt.nz/NewZealanders/MāoriNewZealanders/TamakiTribes/en>.
- Tatton, K. April 2001. Cultural Heritage in the Auckland Region: Priority Areas for Survey and Assessment. Prepared for the Auckland Regional Council.
- Waterson, D. B. 1959. Notes compiled for the Auckland Provincial History Project 1959. Auckland Public Library ref file 185.



APPENDIX A: SITE RECORD FORMS

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/721</p> <p>SITE TYPE: Flour milling</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1742545 Northing: 5931071 Source: CINZAS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/721</p>	
 <p>Scale 1:2,500</p> <p>Eagle Technology, Land Information New Zealand, OpenStreetMap Contributors, Kiwitrail</p>	
<p>Finding aids to the location of the site</p> <p>Riverhead Mill Reserve. Mill race located at 15/17 Duke Street (and sections of the mill race likely still exist further to the north and south of Duke St).</p>	
<p>Brief description</p> <p>Flour/Paper Mill. Mill Race.</p>	
<p>Recorded features</p> <p>Building foundations (unspecified), Pond, Water race, Stone retaining/ facing</p>	
<p>Other sites associated with this site</p>	

SITE RECORD HISTORY	NZAA SITE NUMBER: R10/721
<p>Site description</p> <p>Updated: 03/05/2010, Visited: 01/06/2009 - NZTM E1742545 / N5931071 (CINZAS - Coordinates retained). RDC proposes to construct a walkway within the Riverhead Mill Reserve and the Murray Jones Reserve on the riparian margins of the Rangitopuni River at Riverhead. The purpose of the proposed works is to provide for greater public access along the reserves and to connect the recreational reserves that are currently bisected by the Coatsville – Riverhead Highway Bridge, State Highway 28 (SH28). The primary ground disturbance associated with the project relates to the installation of a 32m length of pathway and associated drain within the northern boundary of the Riverhead Mill Reserve and the installation of a footpath extension and pedestrian stairway that traverses the coastal escarpment of the Murray Jones Reserve. Although the earthworks associated with the proposed project are relatively minor, any earthworks undertaken within the Riverhead Mill Reserve have the potential to impact on features associated with this recorded 19th century archaeological site. An HPT Authority was sought and obtained in 2010 (Authority 2010/237). Inspected by: Plowman, Mica.</p> <p>Updated: 30/04/2012 - Information from NZHPT authority files 2003/247 and 2003/144, describes damage to the southern wall of historic water race and the side wall of the associated holding pond at 1003 Coatsville Road. Small remnant features of water race removed from 11 Elliot Street under authority (2003-144). Updated by: Walter, Greg / Ricketts, Sarah.</p> <p>Updated: 29/08/2013, Visited: 08/04/2013 - Part of the mill race located on 15-17 Duke Street was monitored in accordance with Authority 2013/379. E1741899, N5931168. The area is currently undergoing subdivision development, and monitoring and investigation is ongoing. Subsurface remains of the mill race were present in the form of a infilled earth cut ditch with an irregular base, c.4.3m wide and 0.7m deep. The eastern side cut was steeper than the left with a step and a possible revetment was placed here as the ditch was cut through a slope. No artefacts were recovered. The project is ongoing and the report is forthcoming. Inspected by: Phear, Sarah.</p> <p>Condition of the site</p> <p>Updated: 30/09/2010, Visited: 01/06/2009 - Archaeological monitoring was undertaken in April 2010 of all earthworks in accordance with HPT Authority conditions. No archaeological material was identified.</p> <p>Updated: 29/08/2013, Visited: 08/04/2013 - The ditch has been destroyed by earthworks at 15-17 Duke St, but was monitored and records made under Authority 2013/379. The race likely still exists further to the north and south of Duke St.</p> <p>Statement of condition</p> <p>Updated: 30/09/2010, Visited: 01/06/2009 - Excellent – Visible features are intact and clearly defined</p> <p>Current land use:</p> <p>Threats:</p>	



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION		
 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/1537</p> <p>SITE TYPE: Historic - domestic</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>	
<p>SITE COORDINATES (NZTM) Easting: 1741261 Northing: 5930332 Source: On Screen</p>		
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/1537</p>		
 <p>Scale 1:2,500</p> <p>Eagle Technology, Land Information New Zealand, OpenStreetMap Contributors, Kiwi rail</p>		
<p>Finding aids to the location of the site</p> <p>Within the gardens to the north of the modern dwelling at 298 Riverhead Road, Riverhead. There is a tall stand of old gum trees immediately to the west.</p>		
<p>Brief description</p>		
<p>Recorded features</p> <p>Building foundations (unspecified)</p>		
<p>Other sites associated with this site</p>		
<p>Printed by: richardshakles</p>		<p>11/03/2022</p>
<p>1 of 6</p>		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD HISTORY

NZAA SITE NUMBER: R10/1537

Site description

Updated 11/03/2022 (Field visit), submitted by richardshakles , visited 03/03/2022 by Shakles, Richard
Grid reference (E1741261 / N5930332)

Site of late 19th century house with associated outbuildings. The site was visited as part of a field survey following the identification of a late 19th century house depicted on a plan (SO 6070) dated August 1891 and within the location that it today occupied by private residences at 298 and 306 Riverhead Road (Figure 1 and Figure 2). The surveying of the plan was undertaken to record the line of the public roads in the area and depicts a single dwelling in the northwestern corner of Lot 140 along with the name of the owner of the house and land (E. Ellis). A later plan (DP 4818) dated July 30th 1909, shows more detail with the house depicted as a perfectly square structure, perhaps consistent with a late 19th century square villa (Figure 3 and Figure 4). The plan also shows two other structures to the south of the house that are probably associated outbuildings such as sheds or a small barn structure.

The survey established that there are no surviving above ground features, although there was no sign of ground disturbance and it is likely that features associated with the structures and their occupation such as postholes, refuse pits and perhaps a well, along with associated artefacts will be present in situ and subsurface.

Condition of the site

Updated 11/03/2022 (Field visit), submitted by richardshakles , visited 03/03/2022 by Shakles, Richard

Subsurface but likely good

Statement of condition

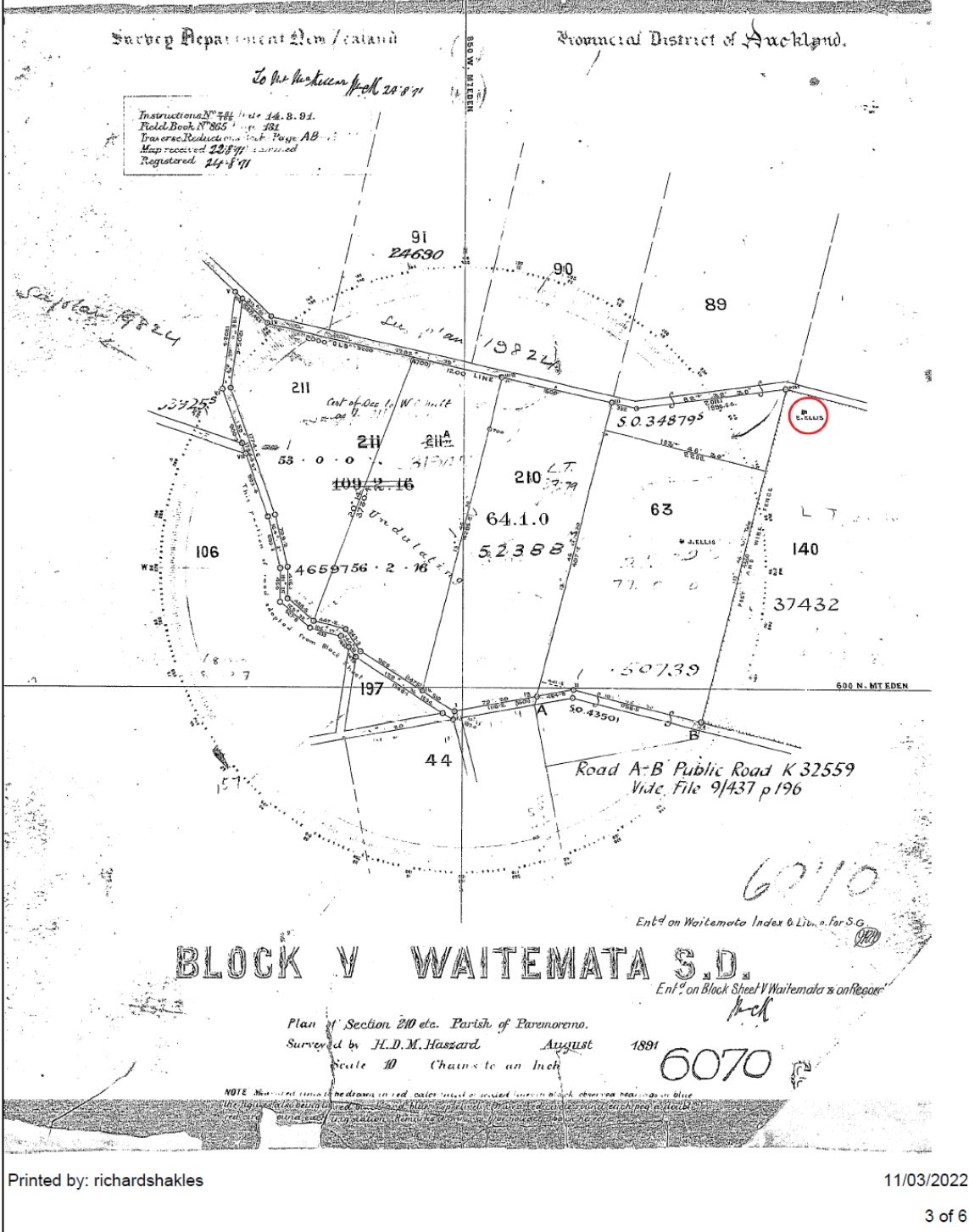
Current land use:

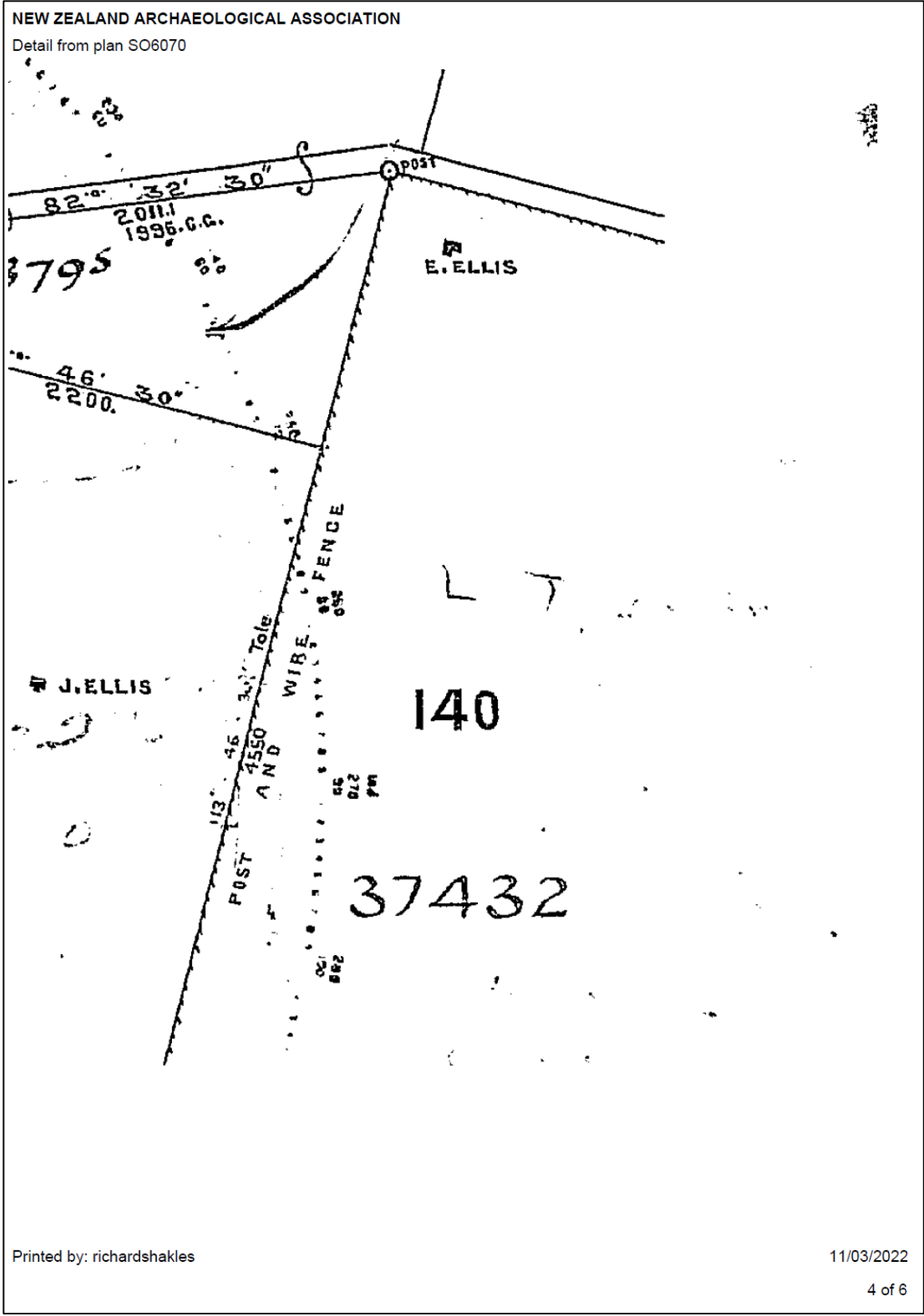
Threats:

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD INVENTORY	NZAA SITE NUMBER: R10/1537
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Supporting documentation held in ArchSite
SO 6070 Plan dated 1891 showing house belonging to 'E. Ellis'





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11/03/2022

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Plan DP 4818 dated July 30th 1909 showing additional two structures to the house on Lot 140

